DOCUMENT RESUME

ED 131 155 95 UD 016 553

AUTHOR	Forehand, Garlie A.; And Others
TITLE	Conditions and Processes of Effective School Desegregation; Final Report.
INSTITUTION	Educational Testing Service, Princeton, N.J.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Office of Planning, Budgeting, and Evaluation.
REPORT NO	ETS-PR-76-23
PUB DATE	Jul 76
CONTRACT	OEC-0-73-6341
NOTE	372p.
EDRS PRICE	MF-$0.83 HC-$19.41 Plus Postage.
DESCRIPTORS	*Academic Achievement; Caucasian Students; Change Agents; Change Strategies; Demography; Educational Change; Elementary Secondary Education; Ethnic Groups; Evaluation; Geographic Location; Integration Effects; Integration Methods; Integration Plans; Minority Groups; Negro Education; *Participant Characteristics; Racial Balance; *Racial Composition; Racial Discrimination; Racial Integration; School Environment; *School Integration; School Policy; School Role; *Schools; Social Change; Social Integration; Socioeconomic Status; *Success Factors; Trend Analysis

ABSTRACT

This study focuses on school characteristics that distinguish between schools that are more effective and less effective in achieving positive results of desegregation. Effectiveness is here defined by measures of student achievement and race relations. The aim was to find school conditions that were susceptible to change and that showed promise as components of a program to improve the progress of integration. Most schools in the study had substantial numbers of both black and white students. In order to provide a range of racial composition, some schools with up to ninety percent of one race were included. The major findings of the study fall into two categories: (1) relationships involving student socioeconomic status, and (2) relationships between school characteristics and student outcomes independent of student background. The findings lend support to the following conclusions: (1) there are school conditions that are systematically related to favorable outcomes of integrated schooling over a wide range of socioeconomic, demographic, and geographic conditions; (2) some of the conditions associated with successful integration are under the control of school personnel; and, (3) while school conditions have varying effects on different student outcomes, the findings are not plagued by the contraditions and incongruencies said to be often found when many outcomes must be considered simultaneously. (Author/AM)

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FINAL REPORT

CONDITIONS AND PROCESSES OF EFFECTIVE SCHOOL DESEGREGATION

Garlie A. Forehand
Marjorie Ragosta
Donald A. Rock

July 1976

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

A Report Prepared Under
Contract No. OEC-0-73-6341

UD 016553

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Office of Planning, Budgeting, and Evaluation

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Acknowledgements

The work of this project was assisted in so many ways by so many people that it is impossible to achnowledge all contributions properly. We express special appreciation to the following people.

Robert L. York, the U.S. Office of Education Project Officer, has been an active and invaluable participant in all phases of the project, from initial conceptualization to final report. He has made professional contributions to research design, instrument development, analysis, and interpretations. Those contributions can only be inadequately conveyed by a formal acknowledgement. Bob York has been a source of ideas, a patient facilitator, and a valued colleague.

The members of the technical advisory committee gave generously of time and expertise. The product would have been better if we could have followed more of their suggestions. The members of the advisory committee are:

Thomas F. Pettigrew
Nancy H. St. John
Melvin M. Tumin
Herbert J. Walberg
Bernard C. Watson
Herbert I. Weisberg

Numerous colleagues have helped in various phases of the project. We can only list their names, suggest areas of their contributions, and express our thanks.

Instrument development: Samuel Barnett, Robert Feldmesser, Marlaine Lockheed, La Frances Rose, Anne Trask. Joseph Williams.

Data Collection: Nada Alston, Charles Anderson, Lola Appel, Clyde Aveilhe, Samuel Barnett, Joseph Bianchini, Myra Boime, Penny Dendy, Diran Derman, Alfred Figures, Joyce Gant, Philip Harvey, Jayjia Hsia, Mary Johnson, Santelia Johnson,

Esther Ann MacCready, Olive Molder, Delores Napper, Dan Norton, Barbara Perrin, Lorraine Provost, Myrtle Rice, Wilson Riles, Jr., Carroll Rogers, Anne Trask, Jeremiah Waites, Gina Wilson.

Data Analysis and Interpretation: William Allen, Albert Beaton, Robert Boldt, Gary Echternacht, John J. Ferris, Robert T. Patrick.

Interim Reports: Effie Bynum, Sandra Kerr, Wendy Steinhart, Renee Woloshin.

Connie Beadle has been an expert and patient project secretary and has assumed major responsibility for the preparation of reports. Elsa Rosenthal made excellent editorial contributions to the reports.

Frederick McDonald contributed leadership in the early stages of the project and valuable colleagueship throughout. Edmond Gordon has been a source of invaluable ideas and guidance.

Our necessarily anonymous respondents in the schools contributed countless hours of thought and work. The principals and superintendents who allowed us to collect data were invariably helpful and gracious.

Gina Wilson put it all together. As project manager for an incredibly intricate project, she has been a master of detail and a model of dedication.

To all, our thanks. We are happy to acknowledge the contributions that many persons have made to this report, and we absolve them of blame for its defects.

Garlie A. Forehand
Marjorie Ragosta
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Summary of Major Findings

This study of conditions and practices of effective school desegregation focused on school characteristics that distinguish between schools that are more effective and less effective in achieving positive results of desegregation. Effectiveness is defined by measures of student achievement and of race relations. The attempt was to find school conditions that are susceptible to change and that show promise as components of a program to improve the progress of integration. The focus of the study was on black and white student desegregation. Most schools in the study had substantial numbers of both black and white students. In order to provide a range of racial composition, some schools with up to 90 percent of one race were included.

Methods

The data for this study were from a survey of 96 elementary schools and 72 high schools conducted in the spring of 1974, and a follow-up survey of 22 elementary schools and 21 high schools in 1975. Site visits and interviews were conducted in 24 elementary schools and 24 high schools in 1974 and in all 43 schools in 1975. The purpose of the site visits was to obtain examples of school practices and problem solving. The interview material was used to develop specific suggestions for action by school personnel. These suggestions are presented in a handbook which is a separate report of this project.

Fifth grade students in elementary schools and tenth grade students in high schools took a 50-minute achievement test and completed a questionnaire. The questionnaire contained questions regarding personal attitudes, background, and descriptions of the school. The outcome measures of the study were based on the student data. At the elementary school level, two measures of race relations were used. The first, labeled student racial attitudes, included statements of personal attitude, such as desire for friends of a different race and liking for integrated schooling. The second, labeled perceived school racial attitude, included statements about how students thought teachers and principals liked integration. At the high school level, two additional measures of race relations were used. A measure of racial contact was based on students' descriptions of their voluntary associations with students of a different race. A measure labeled school fairness included statements about the degree to which the students felt that school personnel and practices were fair to them. Outcome measures were analyzed separately for black and white students.

Principals, teachers, and, in high schools, guidance counselors also completed questionnaires. Items from the questionnaires of staff members were grouped to form composite measures descriptive of school characteristics. Among the measures of school characteristics were teachers' racial attitudes, principals' racial attitude, support for integration, teaching style, and multiracial teaching practices.

In attempting to explain variations in outcomes, emphasis was placed on school characteristics rather than on broader community conditions. This emphasis focuses attention on actions schools can take to improve integration. In statistical analyses, background variables that might be expected to influence outcomes were taken into account. The background measures were the socioeconomic status (SES) of black students, the SES of white students, the racial composition of the school, the degree of urbanness of the area in which the schools were located, and the location of the school in Southern or non-Southern states. In analyses of the relationship between school characteristics and outcomes, a regression estimate of outcome as a function of background was computed. School characteristics were associated with residuals from these regression estimates. The unit of analysis was the school.

Major Findings

The major findings of the study fall into two categories: relationships involving student socioeconomic status and relationships between school characteristics and student outcomes independent of background.

Socioeconomic Status and School Integration

The role of student background in determining educational outcome is often cited. In this study as in many others, socioeconomic background of students in a school is related to achievement and attitudinal outcomes. The results of this study also suggest emphasis on the other side of the coin. Background measures are also related in systematic ways to school conditions and practices. At both the elementary and high school levels, schools whose black students have low mean SES scores tend to have the following characteristics: negative teacher racial attitudes; absence of teaching practices related to race relations; perception by teachers of differences between black and white students; and lack of support for integration. Elementary schools whose black students have low mean SES scores also are characterized by a teaching style that emphasizes warning and scolding. High school principals are less likely to evaluate race-relations programs, instructional programs, and human relations programs as adequate when black student SES is low.

These results indicate that students who are both poor and black are in double jeopardy. Not only are racial attitudes poorer in schools with low SES black students, but the practices which might help to change those attitudes exist to a lesser degree.

These results--and those pertaining to other background variables--suggest caution in attributing poor educational outcomes to "student background." When student background affects both the student's own attitudes and achievement and also the nature and quality of the education that the student receives, the school must share responsibility for poor outcomes.

School Conditions and Integration

In both elementary schools and high schools school conditions bear a closer relationship to good race relations than to achievement test scores. In high schools there are no school conditions that account for achievement scores when background conditions are statistically controlled. There are school conditions that predict how positive race relations will be, independently of the backgrounds of the students. This section summarizes conclusions about major school factors in effective race relations. The school variables that are most consistently related to student outcomes can be grouped into five categories:

(a) Teaching and school activities designed to promote biracial association and support.

(b) A positive evaluation by teachers of high school principals.

(c) Positive racial attitudes of teachers, which are reported by teachers themselves and perceived by students.

(d) Support for integration which is shared and perceived by teachers, administrators, and students.

(e) Absence of conflict and tension regarding racial issues and other social and educational concerns.

In addition there are variables that have important relationships to specific components of race relations. They include the friendliness of interpersonal relations in the school, the teachers' evaluation of student achievement, and programs of human relations and race relations that are evaluated as helpful for race relations.

Teaching for good race relations. Schools that teach for effective race relations have good race relations. This is perhaps the most consistently found relationship. It is found in both elementary and high schools and in relation to the attitudes of both black and white students. In elementary schools, teaching methods oriented toward good race relations are associated with improved achievement as well. There are several indicators of "teaching for effective race relations." They include the use of multiracial curriculum material; the teaching of minority-group history and culture; systematic use of projects on social and attitudinal issues related to race; assignment of black and white students to work together; and assignment of black and white students to play together in organized activities.

Evaluation of the principal. High schools that have good race relations tend to have principals that are evaluated highly by teachers. These principals are described as supportive of both black and white teachers and as persons of major influence in the school and district. They also receive high overall ratings from the teachers.

Teachers' racial attitudes. In high schools, the racial attitudes of teachers and principals have a strong relationship with the racial attitudes of white students. The racial attitudes of teachers also predict the interracial contact of white students. In elementary schools, black students perceive racial attitudes in the school to be positive when teachers' racial attitudes are positive.

In both high schools and elementary schools, favorable racial attitudes of the teachers and principals are associated with favorable student race relations. This suggests that the model of race relations set by adults in the school influences the nature of student race relations in the school. (These associations are reduced when adjustments are made for student background. This fact does not invalidate the findings, because of the substantial correlations between black student SES and the attitudes of teachers and principals.)

The racial attitudes of principals have complicated relationships with educational outcomes. The relationships vary in size and sign depending on what outcome measure is used, which race of students is studied, what background variables are controlled, and whether measures are taken at the elementary or high school level. The results pertaining to teachers' evaluation of principals suggest that principals play an influential role in the success of integration. That conclusion is strongly supported by the impressions of interviewers who visited schools. But the influence cannot be easily summarized in a pattern of correlational results. Several analyses were performed to examine the role of principals' racial attitudes along with other variables. These analyses suggest that principals' racial attitudes have an indirect effect on the racial attitudes of white students. Principals' racial attitudes seem to have direct influence on the attitudes of teachers in elementary schools and on teaching practices in high schools. These variables in turn have a direct effect on the racial attitudes of white students.

Support for integration. Schools vary in the degree to which teachers, administrators, school officials, and students communicate support for integration. Support for integration is related to more favorable race relations, especially at the high school level.

Reduction of conflict and tension. Low conflict and tension is consistently associated with good race relations, whether the conflict is reported by teachers or principals, whether the effect is on black or white students, and whatever the source of the conflict. At the high school level, all student-measured indicators of race relations are more favorable when tension and conflict are lower. At the elementary school level, lower amounts of tension and conflict are associated with students' perceptions of better racial attitudes in the school. This is probably a situation where cause and effect is inextricably intertwined. Low conflict and tension is probably both a cause and an effect of good racial attitudes. Reduction of conflict and tension is an approachable intermediate goal of a program to improve integrated education.

Conclusions

This study set out to determine whether school conditions have a bearing on the effectiveness of racial integration, apart from the effects of students' personal backgrounds and of community characteristics. To focus on school conditions as determinants of student attitudes and achievement is to accept a limitation on the amount of variation in student outcomes that the study can explain. Social conditions in the community and family backgrounds of students undoubtedly have a strong effect on the success of integration in a particular school, whatever the conditions and practices are in the school itself. On the other hand, the emphasis on school conditions focuses attention on actions that school personnel can take to improve integrated education.

The findings lend support to the following conclusions. First, there are school conditions that are systematically related to favorable outcomes of integrated schooling, particularly to good race relations, over a wide range of socioeconomic, demographic, and geographic conditions. Second, some of the conditions associated with successful integration are under the control of school personnel. It is feasible for schools to have programs to improve teaching practices, racial attitudes of adults, support for integration, and interpersonal relations. Third, while school conditions have varying effects on different student outcomes, the findings are not plagued by the contradictions and incongruencies often found when many outcomes must be considered simultaneously. In general, actions that might be taken to improve race relations are compatible with actions to improve achievement. Conditions conducive to favorable attitudes of white students are consistent with those conducive to favorable attitudes of black students. It is possible to build a program of simultaneous activities to improve a wide range of components of effective integration, with reasonable hope of success.

Chapter 1

Introduction

After summarizing 120 studies of school desegregation, Nancy St. John (1975) concluded:

> At this juncture, further investigation of the broad question — Does desegregation benefit children? -- would seem a poor use of national resources. The pressing need now is to discover the school conditions under which the benefits of mixed schooling are maximized and its hardships minimized. (Underscore added.)

The goal of the study presented in this report was to discover such conditions. The guiding question was: What school conditions distinguish between schools that have achieved "successful" integration and those that have not? Therefore, unlike many studies of integration, this is a study of integrated schools. The question is not whether integration has effects different from those of segregation, but rather whether there are school conditions that foster effective integration.

All of the schools in this study had both black and white students. A few schools had substantial representations of other minority groups. The focus of the analysis is on the achievement and attitudes of black and white students. This emphasis does not imply lack of interest in other minority groups or an assumption that results regarding integration of black and white students can be generalized easily to integration that involves other racial and ethnic groups. It was, rather, a strategic decision necessitated by economic and practical limitations in the conduct of the research.

Purpose of the Study

This study began in May, 1973. It was intended to extend the work of the ESAP-II evaluation conducted by the National Opinion Research Center and detailed in its report Southern Schools (National Opinion Research Center, 1973). The Southern Schools study evaluated programs supported by the Emergency School Assistance Program during the 1971-72 school year. It found that the achievement of black male high school students was higher in schools which had ESAP funding than in randomly assigned comparison schools without such funding. There were no significant differences for female high school students or for elementary schools. The authors also examined how the funds were spent by the schools. High schools, more often than elementary schools, spent special funds on activities to improve race relations, such as extracurricular activities and race-relations training for teachers.

The Southern Schools study also found that students' attitudes toward integration were more likely to be positive in schools that emphasized human relations and innovative programs in curriculum organization than in schools that emphasized guidance, counseling, or basic services. Moreover, schools whose principals and teachers took positions supportive of integration had students who were more favorable to integration. These results lent encouragement to the hypothesis that school actions and programs have an effect on the success of integration. The present project is an additional effort to identify school conditions and practices that characterize effective racial integration.

Some Conceptual and Strategic Issues

There are questions of conceptualization and strategy that must be faced at the outset of a study of a subject as complicated as racial integration. Three of these questions, and the decisions made in the conduct of this study, deserve mention at the outset of this report, because they affect the interpretations made throughout the report. The issues have to do with (a) how to define "effective integration" for purposes of analysis, (b) how to select and define the conditions to be examined in relation to criteria of effective integration, and (c) what unit of analysis should be used in examining variance.

There are many perspectives for defining effective desegregation. Effectiveness might be measured as the absence of overt confrontation. It might be defined in terms of teachers' and principals' satisfaction with the way students behave, or by their judgments about how well students are learning. It might be defined as acceptance of integrated schools by the community. In this study, criteria of effectiveness are based on students' responses to achievement tests and attitude questionnaires. Although basing measures of effectiveness on student measures is necessarily an arbitrary choice to some degree, most participants would agree that the final test of the effectiveness of integration depends on its impact on students. The information given by teachers and principals about themselves and about their schools is used to measure variables which are interpreted as school characteristics. On the other hand, this study treated certain aspects of students' perception of the school environment as dimensions of effectiveness of integration, as described later in this chapter. Again the decision whether to treat such student variables as criteria of effectiveness or as school conditions that influence effectiveness is an unavoidably arbitrary one. The approach taken here reflects the judgment that students' perceptions of schools as supportive of integration and as fair to students are indicators of effective integration, and therefore are properly treated as educational objectives. A further description of the variables used as criterion measures is given in Chapter 2.

A second strategy decision was to focus on school conditions as potential determinants of variations in effectiveness of integration. Obviously, school conditions are but a subset of environmental conditions that affect the achievement and attitudes of students. For example, it is probable that a student's racial attitude is influenced by the attitudes of parents; by predominant attitudes in the community; by the degree to which local officials support integration; by the student's own history of multiracial schooling; by the relative peacefulness of the integration process in the community; and by many other variables. To select a small subset of potential influence is to accept limitations on the degree to which variance in student measures can be accounted for. On the other hand, school conditions constitute a subset of variables with particularly important policy implications. If it can be established that, whatever the impact of extra-school factors, there are school conditions that have measurable effects, these effects will have an important bearing on the design of educational programs and the conduct of school activities. It is the responsibility of school personnel to arrange school conditions for maximum educational benefit, whatever the conditions in the homes and communities of the students. The emphasis in this study was on practical approaches to educational policy as planned and implemented by schools, school districts, and funding agencies.

A third strategy decision stemmed from the emphasis on school conditions. The school was the unit of analysis. In the analysis reported in this report, student and teacher responses were aggregated to the school level. Therefore, descriptions of statistical relationships refer to school means of student and teacher variables, rather than to the responses of individuals. The variance examined is variance among schools.

Policy Questions

This study is intended to provide information useful in formulating and implementing educational policy. A dictionary definition of policy is "A definite course or method of action, selected among alternatives in the light of given conditions, to guide and determine present and future decisions." The present and future decisions must be made at many different levels: by the teacher in the classroom, the principal and curriculum committee in the school building, the superintendent and school board in the community. State and federal agencies require policy to guide decisions regarding the coordination, funding, support, and evaluation of activities that take place at other levels. Results and conclusions may be relevant to present and future decisions at more than one level. At the school and classroom level the results should inform decisions about educational practice, from day to day and from school year to school year. At levels more removed from students, the results should have relevance to the development of coordinated programs of support, initiation, evaluation, and dissemination of educational practices. The study was designed and conducted to provide information relevant to the following policy questions.

Effectiveness of School Characteristics

Are there observable characteristics of schools that are reliably associated with desirable educational outcomes? There is a wide range of kinds of school characteristics that might have positive or negative effects, including the attitudes of staff members, the curriculums, policies regarding extracurricular activities, discipline, formal and informal organizational procedures, and the social climate of the school. The research aim was to explore school variables that are predictive of effective racial integration.

Effective Conditions and Practices

If there are school characteristics associated with effective integration, what are their action components? The emphasis in research dealing with ways to improve school practices must be on variables that are at least potentially modifiable. There is need for effort to identify dimensions of school effectiveness that can be translated and replicated by other schools. Thus special emphasis is placed on problems and practices that can be changed and controlled.

The Question of Causality

A question that must be faced in any research based on observational data is this: to what degree do the associations observed imply causal relationships? If there are human-relations programs in schools with good race relations, does that mean that human-relations programs produced the desirable result? The other alternatives — that good race relations cause schools to implement human-relations programs, for example, or that particular social settings are likely to produce both good race-relations and human-relations programs -- must be evaluated carefully as explanations. Policy makers need to know the direction of causality -- or at least to know enough of the evidence for or against a particular causal direction to protect themselves from false assumptions. In the study of school effectiveness (whatever the dimensions of effectiveness at issue) the critical problem of sorting out effects of schools from the effects of the students' home and community backgrounds must always be confronted.

Questions of Implementation

Survey data can point to the existence of conditions associated with positive outcomes. Equally important is the question of how those conditions can be achieved. At the school level, the question of what principals and faculty can do must be a constant guide to interpretation. At levels above the school itself, key policy questions include how the development and implementation of programs to achieve effective integration can be encouraged and supported.

Congruence among Effects

Effectiveness of school integration is a multivariate domain. In such situations, policy makers and policy researchers are plagued by the ubiquity of interactions. Can one be sure that what is good race relations for white students is also good race relations for black students? Is manifestation of one desirable feature of race relations -- e.g., absence of overt conflict -- actually congruent with other desirable features -- e.g., diminution of prejudice and equality of opportunity? One can postulate conditions under which such outcomes might occur together, others in which they might be independent, and still others in which they might conflict. Another interactive question is how school conditions interact in their effects. Are there conditions that produce desirable effects for one race and undesirable ones for another? Do conditions that foster good race relations help or hamper academic achievement? Events within schools interact with the larger social system and chronology. Will a proposition that is supportable in one school at one time be equally valid in other places and other years, when a wide range of differences in the environment exists? Other things are rarely equal in the world of education. It is the responsibility of researchers to illuminate the potential effects of interactions, and of policy makers to take them into account with intelligence and without paralysis.

Procedures

The basic data for this study are from a survey of schools conducted in 1974, and a follow up of a subset of these schools in 1975. In addition, the 1972 Southern Schools data base, collected by NORC, was made available. In addition to the survey, a series of site-visit interviews was conducted on a subsample of schools in the 1974 sample and all the schools in the 1975 sample. The analyses presented in this Technical Report are of the survey data. The interview data were collected in an effort to obtain more specific examples of effective and ineffective school practices. Those results are the basis for a separate report, a Handbook for Integrated Schooling, which presents suggestions for improving a school's program of integration.

Data Bases

Several data bases were used for the analyses in this report. Their characteristics are summarized in Table 1-1. Their origin is described briefly in this section.

The Southern Schools data base. This set of data was collected by NORC in 1972. The schools were all in Southern states. Seventy-eight high schools and 136 elementary schools were used in an experimental study of the impact of funding through the Emergency School Assistance Program. Half of those schools were randomly assigned to the experimental program and the other half to a control group. An additional 341 schools were added for cross-sectional analyses. The Southern schools for the present study were selected from the Southern Schools data base.

The 1972-1974 subsample. Forty-eight elementary schools and 48 high schools were selected from the Southern Schools data base to form the Southern portion of the sample survey in 1974. These schools were selected to represent four categories. Two categories were based on achievement results in 1972. One set of schools was selected as showing evidence of effective achievement in 1972. A comparison group had less effective results on achievement scores. A similar selection was made on the basis of race-relations data from the 1972 survey. Schools with effective race relations and comparison schools less effective in race relations were identified. Table 1-2 shows the distribution of these schools by categories. The method of selection is described briefly in this section. The schools selected by these methods constitute the data bases labeled 2 and 4 in Table 1-1. Data base 2 contains 1972 data from the NORC survey. Data base 4 contains 1974 data collected for this study.

Table 1-1

Review of Data Bases

	Elementary Schools			High Schools		
	Survey			Survey		
Data Bases	Northern	Southern	Total	Northern	Southern	Total
1972						
1. (NORC) Southern Schools Sample	--	228	228	--	161	161
2. 72/74 Subsample[A]	--	48	48	--	48	48
1974						
3. Total Sample	46	48	94[*]	24	48	72[**]
4. 72/74 Subsample[A]	--	48	48	--	48	48
5. 74/75 Subsample[B]	11	11	22	10	11	21
1975						
6. Total Sample[B]	11	11	22	10	11	21

[A] Data bases 2 and 4 contain the same schools; 1972 data are in data base 2; 1974 data are in data base 4.

[B] Data bases 5 and 6 contain the same schools; 1974 data are in data base 5; 1975 data are in data base 6.

[*] 76 with complete data

[**] 62 with complete data

Factor analyses of test and questionnaire data were performed using data from the Southern Schools 1972 data base. Separate analyses were performed for elementary school and high school data.

In both elementary school and high school samples, separate achievement factors for black and white students were defined. These factors were used to identify the schools in the effective achievement categories and the respective comparison schools. Factor scores were entered in a regression analysis to remove background effects due to the state, the percent urban of the school district, the percent black students in the school, black student socioeconomic status, and white student socioeconomic status. The residual scores of the regression analysis identified outliers, i.e., schools which were markedly above the regression line and therefore better than expected on each of the factors.

To select schools effective in achievement, the residual factor scores for black and white student achievement were used. Effective schools were selected to maximize the distance above the regression line of both black and white achievement scores: both scores must have been above the regression line and one score more than one standard error above. A decision was made to select the average rather than the poorest performing schools as comparisons; therefore, outliers well below the regression line were not selected as comparison schools. Comparison schools were selected on the basis of scores at or near the regression line. The reason for selecting comparison schools near the regression line was that it appeared probable that the factors responsible for very poor achievement might be different from those that distinguish between schools that are excellent and average in achievement. In 1972, when the initial data were collected, many of these schools were newly

Table 1-2

Distribution of the 1974 Survey Schools

	Southern Sample		Supplementary Sample	
	Fifth	Tenth	Fifth	Tenth
Achievement				
Effective	13	16	14	7
Comparison	13	16	14	7
Race Relations				
Effective	11	12	(18)	(10)
Comparison	11	12		
Total	48	56*	46	24

---

*Actually only 48 different schools since some schools served double duty, e.g., effective in both race relations and achievement.

integrated. Some had experienced a year of serious disorganization. It was believed that an effort to discover differences among schools that were at least partially successful would lead to more generalizable conclusions. Therefore, the greater variance that would have resulted from choosing schools far below the regression line was sacrificed in exchange for emphasis on what was believed to be a more normal range of school functioning.

The rationale for the selection of schools effective in race relations was similar, but was complicated by the multivariate nature of the criterion. A configural approach to identifying effective schools was used. Selection of effective elementary schools was made with an attempt to maximize distance above the regression line on several dimensions. Standardized residual scores on four factors were computed. The factors were black and white student racial attitudes, interracial aggression, and teacher evaluation of integration. To be selected as effective a school had to have at least two measures one standard error above the regression line, and no measures more than one-half of a standard error below the line. Comparison schools at or near the regression line were selected from the same school districts whenever possible.

High schools with evidence of effective race relations were selected on the basis of the standardized residual scores on six factors. The factors were: white students' racial attitudes, amount of aggression, positive racial contact, black students' racial attitudes, and their evaluation of integration, teachers' evaluation of integration, and white students' evaluation of integration. Schools were characterized as:

+ (more than one standard error above the regression estimate)

- (more than one standard error below the regression estimate)

o (within one standard error of the regression estimate)

The criterion for a school's being selected as an effective school was either (a) at least two pluses and no minuses, or (b) three or more pluses and one minus. Comparison schools were selected in the same manner as elementary comparison schools.

The 1974 total sample. The Southern schools described above were supplemented by 46 elementary schools and 24 high schools from the Northern and Western parts of the country. The classification of these supplementary schools is presented in Table 1-2.

The schools classified as effective in achievement and their comparison schools were selected from data bases that contained information about achievement scores recorded by school. At least 17 states were contacted about the availability of statewide data bases from which ETS might make school selections. In addition, school districts in several states were contacted. Two large research data bases were investigated and the Office for Civil Rights data base as well. All of these data bases had been assembled for purposes different from those of the present study and had some inherent limitations:

(1) There were no systematic collections of data bearing directly on the quality of race relations in schools.

(2) Achievement data were more readily available for elementary schools than for high schools.

(3) Existing data bases did not report achievement data for black and white students separately.

Because of the difficulty of finding appropriate data bases, the procedures for selecting achievement schools differed from the procedures for selecting race-relations schools.

The selection of schools in the effective achievement category was made according to the following criteria:

(1) Only data bases which contained one or more control variables, such as SES, along with achievement were considered.

(2) A regression analysis was run with achievement as the dependent variable. Whenever data were available this analysis was repeated for several years and several grades.

(3) A school was selected as a condidate for effective achievement if its achievement score was at least one standard error above the regression line and if its school population was between 10 and 90 percent black

(4) When a data base sufficiently large to define a regression line was lacking, an estimate of the regression line was formed on one of the larger data bases. This yielded a fallible but somewhat better than ignorant measure.

Comparison schools were selected from the same school district whenever possible on the basis of scores at or near the regression line.

Since no available data bases provided information about race relations in non-Southern schools, samples of elementary and high schools were chosen without information about their prior race relations. In these schools a reduced amount of data was collected, in order to select schools for further study in 1975. Most of the schools or school districts were nominated by knowledgeable researchers or school officials as being particularly effective in race relations. The nomination procedure was useful for identifying candidate schools, but there was no way to verify the nominations, and the nominations were not used as measures in the analysis.

The total 1974 sample (data base 5) is the combination of the sample of Southern schools selected from the 1972 sample (data base 3) and the supplementary sample of Northern and Western schools.

The 1975 total sample. In 1975, 21 high schools and 22 elementary schools were selected. The primary purpose of the 1975 sample was to obtain cases and examples of methods to improve race relations. The schools were chosen to represent (a) schools with eveidence of effective race relations in 1974, and (b) comparison schools.

Selection of 1975 schools was based upon ranking of composite race relations scores developed separately for black and white students at each grade level. Variance due to background was removed and the black and white residual composite scores were ranked across the 94 elementary schools and 76 high schools of the 1974 total sample. Ranks for the black and white composites were summed and schools were ranked according to the combined score. The decision to select 1975 schools on the basis of race-relations results but not achievement results was made after preliminary analysis of 1974 data indicated that school effects and cross-year consistency were greater for race relations than for achievement.

The five or six highest ranking Northern and Southern schools were selected as effective schools in both the elementary and secondary categories. To be finally selected, a school had to (a) have a racial composition in the sample that corresponded to the racial composition of the school and (b) be ranked highly for both black and white student outcomes. Comparison schools were selected from the low end of the rankings according to the same criteria. During the selection process the percentage of black students in both the effective and comparison schools was examined in order to produce sets of schools similar in this regard.

Distribution of schools in the 1975 data base is given in Table 1-3. Data base 6 as described in Table 1-1 comprises the 1975 data from these schools. Data base 5 comprises the 1974 data from the same schools.

Table 1-3

Distribution of the 1975 Schools

	Southern Sample		Northern Sample	
	Fifth	Tenth	Fifth	Tenth
Effective in Race Relations	6	6	6	5
Comparison	5	5	5	5
Total	11	11	11	10

Respondents and Instruments

The respondents in each sample are described in Tables 1-4 (elementary schools) and 1-5 (high schools).

The questionnaires are reproduced in Appendix A. Their content is described in Chapter 2. The student questionnaires and achievement tests were administered by trained members of the contractor's staff. There were two examiners in each session. Questionnaires for staff members were distributed in advance by mail or in person, and picked up by the examiners on the day of the testing. In 1974 the principal's interview was conducted by an examiner during the visit to test students.

Table 1-4

Elementary School Respondents and Sampling Procedures

	Respondents		
	Students	Teachers	Principal
Date Bases 1 & 2[a]			
Number of Respondents	Approximately 53	10	1
Selection Strategy	2 or 3 classes; a stratified sample based on high, middle, and low percentages of black students in 5th grade classes	Random selection from lists of teachers fitting these catagories: 3 grade 5 classroom teachers 4 grade 4 classroom teachers 1 counselor 1 remedial reading teacher 1 gym teacher	—
Data Bases 3 - 6[a]			
Number of Respondents	Approximately 52	10	1
Selection Strategy	2 or 3 classes; a stratified sample based on high, middle, and low percentages of black students in 5th grade classes	Random selection from lists of teachers fitting these categories: 3 grade 5 classroom teachers (including teachers of the selected classes) 5 grade 4 classroom teachers 5 grade 3 classroom teachers 1 remedial/speech teachers 1 gym teacher	—

[a] Described in Table 1-1

Table 1-5

High School Respondents and Sampling Procedures

	Respondents			
	Students	Teachers	G. Counselors	Principal
Data Bases 1 & 2[a]				
Number of Respondents	Approximately 51	10	None	1
Selection Strategy	2 or 3 classes; a stratified sample based on high, middle, and low percentages of black students in 10th grade English classes	Random selection from lists of teachers fitting these categories: 3 English teachers 3 Math teachers 2 History/social studies teachers 1 Counselor 1 Gym teacher	——	——
Data Bases 3 - 6[a]				
Number of Respondents	Approximately 60	10	3	1
Selection Strategy	2 or 3 classes; a stratified sample based on high, middle, and low percentages of black students in 10th grade English classes	Random selection from lists of teachers fitting these categories: 4 English teachers (including teachers of the selected classes) 2 business teachers 1 Voc. Ed. teacher 1 Home Ec. teacher 2 Phys. Ed. teachers	Random selection but including the 10th grade counselor(s)	——

[a] Described in Table 1-1

Chapter 2

Variables and Measures

The data base for this study is complex. It contains multiple items of information, from multiple respondents, obtained in different phases of the the study. In order to identify findings of theoretical and practical significance, it is necessary to combine items into conceptual variables and statistical measures. This task inevitably requires judgment. The methods used in the study reflect the judgments of the authors. Other interpreters and other analysts will undoubtedly prefer other ways of conceptualizing and measuring variables. Indeed, the authors themselves could not maintain a thoroughly consistent mode of conceptualization over the years of dealing with the data. We have tried to maintain consistent methods of treating variables in different analyses, different levels of schooling, and different years. It was not always possible to do so. As a result, it will be necessary to describe variations in measures used in specific analyses.

This chapter sets out the concepts that determined how major variables were defined and measured for statistical analysis. The focus of this chapter is on the 1974 data base, the major source of statistical results. The items and composites discussed in this chapter are from that set of data. Specific variations with regard to other data bases will be described as they become appropriate.

The questions that underlie the analyses are these: Are there characteristics of schools that are systematically related to desirable student outcomes? To what degree are these relationships independent of socioeconomic backgrounds of the students, the geographical location of the schools, and the racial composition of the student bodies? In order to examine such relationships systematically, we have divided the variables of the study into three categories, termed (a) student outcome measures, (b) school conditions, also termed school characteristics and educational process variables, and (c) background variables. In many instances, the assignment of particular variables to a category is arbitrary. For example, the characteristic racial attitude in the school, as perceived by students, might be considered both a measure of school characteristics and a measure of student outcome. Similarly, racial composition of the school is both a school characteristic and a background measure. We attempt in this section to make clear how variables were assigned to categories, and the rationale used in assignments. In interpreting results, one must keep in mind how the specific composites were defined.

Student Outcome Measures

Achievement Measures

The tests used in this study were the fifth grade and tenth grade forms of the Survey Test of Educational Achievement. The test was developed by NORC (1973) under the direction of Dr. R. Darrel Bock. It consists of a shortened version of five of the subtests of the STEP battery developed by ETS and was developed to provide reliable estimates of mean achievement levels for schools. There are forms for both fifth grade and tenth grade levels. Each includes subtests in five achievement areas: Reading, Mechanics of Writing, Mathematics Computation, Mathematics Basic Concepts, and Science.

Statistical analyses conducted by NORC indicated that the reliability of the test was satisfactory. Coefficients of generalizability for fifth grade students ranged from .82 to .94 for different groups of students. Comparable coefficients for tenth grade students ranged from .84 to .91. The statistical results of the ESAP-II study indicated the Survey Test of Educational Achievement provided a satisfactory estimate of school mean achievement. For the analyses reported here, a summary score consisting of the first principal component of the five subtests was used. School means were computed separately for black and white students.

Race-Relations Measures

Race relations as a variable or set of variables poses more complications. Race relations is a multidimensional concept. Its components, conceptually, include the personal racial attitudes of students, the amount and nature of interracial contact, the students' perceptions of support for integration, the equality of treatment and opportunity for the races, and the degree to which students who are in the minority in a given school experience success and acceptance. The attempt to operationalize such a concept raises a series of conceptual and empirical questions. These questions have a direct bearing on the design of this study and the interpretation of the findings, because the measures of race relations constitute key dependent variables. They also have a broad bearing on the conceptualization of expectations for integrated schooling. The design of procedures and practices to facilitate successful integration presupposes awareness and understanding of the nature of race relations.

Among the conceptual and empirical questions to be posed in defining race relations are the following:

1. Dimensionality. Are there identifiable dimensions in a set of measurable indicators of race relations? This chapter outlines the measures of schools used in the analysis.

2. Construction of measures. What composites and scaling procedures are to be used as measures of composites of race relations? What properties do the resulting scales have?

3. Meaning of the measures. How are the measures interrelated? How do they relate to other characteristics of the student body? To what degree should they be considered measures of separate constructs or different measures of the same constructs?

4. Similarity of measures for minority and majority students. A scale might have the same items and the same weights and yet have different psychological interpretations for black and white students. For example, does amount of interracial contact have the same interpretation and significance for black students as for white students? Do black and white students share perceptions of the support for integration and equality of treatment and opportunity? It is critically important that similarities and differences in these perspectives be understood and taken into account, both in the interpretation of research and in policy formulation. To fail to do so is to risk a culturally bound definition of desirable outcomes of integrated schooling and to put forward explanations and proposals that may emphasize the perceptions of one race at the expense of the other.

5. Relationship of race-relations measures to school conditions and practices. Are there school characteristics systematically associated with desirable race-relations measures? Are different facets of race relations consistently related to the same school characteristics? Can race-relations measures be defensibly interpreted as outcomes of schooling that have particular identifiable characteristics? These questions constitute the main focus of this project and this report and key questions for formulating policy

regarding the integration process.

6. Relative importance of facets of race relations. Assuming that there are indeed multiple dimensions in a conceptually acceptable collection of race-relations indicators, which should receive major attention? Educationally, this question is critical, because it goes to the point of defining the educational objectives to be sought. Therefore, it will determine where emphasis is placed and resources concentrated in the development of instructional programs, support mechanisms, and facilities.

Questions 1 through 4 have to do with the nature and meaning of variations in race relations. Empirical questions focus on interrelationships of responses by students and on the relationships of responses to other attitudes and personal characteristics. These questions are the major focus of this chapter. Question 5 turns attention to school conditions and practices that exist and can be measured independently of the characteristics of the student body. In this report such variables are termed, for shorthand, process variables. The relation of process variables to achievement and race relations is described and discussed in detail in Chapters 3 and 4.

Question 6 is one of conceptualization and value. Throughout this report, we attempt to identify congruencies and conflicts among different conceptions of what constitutes good race relations, and to call attention to the implications of different choices.

Race-Relations Composites

Composite measures of race-relations variables were constructed and aggregated to the school level. The procedure for both elementary and high schools was as follows. First, items were grouped into conceptually meaningful categories. Second, item responses were rescaled so that all of the items within a category were scored on the same score range. Third, the item scores were averaged to the school level separately for black and white students. Fourth, item sum correlations were computed across schools. Fifth, an item was retained in a category if (a) the item had a substantial correlation with the sum of items in its own category, and (b) the item did not have a higher correlation with the sum of another category. Items not meeting these conditions were dropped. Sixth, the sums of the remaining items were computed to constitute outcome scale scores.

Fifth grade race-relations composites. At the fifth grade level, two race-relations outcome composites were constructed. Their item content and the item-scale correlations are presented in Table 2-1.

The composite entitled Perceived School Racial Attitude might be interpreted either as a student outcome variable or as a process variable measured through students' perceptions. We have chosen to analyze this composite as a dependent variable, and to refer to it as a student outcome. The reason for this approach is that the perception of the environment as supportive of good racial attitude can be considered an important educational objective of integrated education. Perception by students of positive racial attitudes on the part of teachers and principal is therefore considered to be a criterion of good race relations in the school. In subsequent analyses, we ask what school characteristics (measured by means of teachers' and principals' responses) are associated with the degree to which students perceive race relations in the school to be positive.

Table 2-1

Fifth Grade

School Race Relations Measures

		Item-Scale Correlation[a]	
Perceived School Racial Attitude		B	W
ES 18	Are any of the teachers in this school unfair to white students?	.39	.82
ES 69	How do you think your teacher feels about black and white students going to the same school together?	-.65	-.66
ES 70	How about the principal of your school--how do you think your principal feels about black and white students going to the same school together?	-.63	-.54
ES 28	Are any of the teachers in this school unfair to black students?	.85	.81
Student Racial Attitude			
ES 68	If you could choose the kind of school you would go to, would you pick one with a racial mix of students?	-.84	-.89
ES 25	Would you like to have more friends who are of a different race?	-.69	-.88
ES 29	Are you afraid of most teachers of a different race from yourself?	.41	.63
ES 73	In general, do you think that white people are smarter than black people, black people are smarter than white people, or do you think that a person's color doesn't have anything to do with how smart he is?	.59	.60

a. 1974 data

Table 2-2

Tenth Grade

School Race-Relations Measures

			Item-Scale Correlation[a]	
Perceived School Racial Attitude			B	W
HS	123	How do you think most of your teachers feel about blacks and whites going to the same school together?	-.52	-.41
HS	56	White students complaining that favoritism is being shown to black students.	.61	.77
HS	57	Black students complaining that favoritism is being shown to white students.	.81	.81
HS	58	Tensions have made it hard for everyone.	.75	.89
HS	59	Are any of the teachers in this school unfair to black students?	.83	.54
HS	65	Are any of the teachers in this school unfair to white students?	.31	.55
Student Racial Attitude				
HS	125	If you could choose the kind of school you would go to, would you pick one with with a racial mix of students?	-.79	-.88
HS	35	Do you think your friends would think badly of you if you went someplace after school with a student of a different race?	.74	.78
HS	36	Would you like to have more friends who are of a different race?	-.62	-.89
HS	61	How uncomfortable do you feel around students of a different race?	.63	.68
HS	149	In general, do you think that: White people are smarter than black people, that black people are smarter than white people, or do you think that a person's color doesn't have anything to do with how smart he is?	.19	.72

a. 1974 data

Table 2-2 (Continued)

Tenth Grade

			Item-Scale[a] Correlation	
Racial Contact			B	W
HS	30	Think for a moment about the three students you talk with most often at this school. Are they the same race as you?	.66	.80
HS	31	Have you ever called a student of a different race on the phone?	-.73	-.85
HS	32	This school year, have you helped a student from another race with schoolwork?	-.64	-.77
HS	33	This school year, have you asked a student from another race to help you with your homework?	-.80	-.85
School Fairness				
HS	22	At school, are you often blamed for things that just aren't your fault?	.65	.71
HS	74	Do you think most of the rules in this school are fair?	-.57	-.70
HS	152	In the past year, were you ever sent to the office because someone thought you were breaking some rule?	-.72	-.68
HS	92	When you get punished at school, does it usually seem it's for no good reason at all?	.56	.63

---

a. 1974 data

Examination of item-scale correlations across schools reveals that, for black students, teacher fairness to black students is the variable with greatest relevance to this composite. The teachers' and principals' attitude toward integration are also important contributors to the score. For white students, fairness to white students and fairness to black students are equally highly related to the composite. Therefore, for white students, more than for black students, the composite appears to represent a general perception of fairness. However, the white students measure is also substantially influenced by perceived teachers' and principals' attitudes toward integration. It seems reasonable to conclude that schools characterized by high scores on these measures are perceived by their students to provide adult attitudes supportive of positive racial attitudes.

The student racial attitude composite is measured for both races by a preference for integrated schooling, desire for friends of a different race, and the opinion that race doesn't account for smartness. Being afraid of teachers of a different race accounts for more variance in the white students measures than in those for black students, but is represented in measures for both races.

Tenth grade race-relations composites. Four outcome composites were defined for high schools. Their content is presented in Table 2-2.

The composite entitled perceived school racial attitude is characterized by descriptions of favoritism, unfairness to students, and tensions. The perceived attitude of teachers toward integration also contributes variance.

The student racial attitude composite differs in one respect for black and white tenth graders. In the white student measure, the opinion that race doesn't predict smartness has a substantial correlation with the composite. In the black student measure, this item-scale correlation is low.

The racial contact composite reflects the degree of voluntary positive contact among black and white students.

The composite labeled school fairness does not include specific reference to race. It was constructed because it represents a conceptually meaningful component of race relations in a school. The variable relates both to school perception and to self-perception. Students who are in a racial minority in an integrated school often complain that rules and procedures are biased in favor of the majority race. This perception relates, on the one hand, to the perceived fairness of rules and procedures. On the other hand, it reflects one's sense of personal efficacy. To the extent that rules are perceived as unfair and arbitrary, the students perceive fewer opportunities to exert personal control over what happens to them. In the present study, black students are in the minority in most of the sample schools. For this reason, special attention is focused on the responses of black students to this composite. It will be considered a desirable race-relations outcome if black students in a school report fairness. This is not to deny the importance of fairness for white students; as a measure of school integration, however, the response of minority students to this measure is of particular importance.

Properties of the Measures

An examination of empirical properties of the student outcome measures can shed light on the nature of achievement and race relations as school characteristics, and on the results relating race relations to the educational process. Two sets of data are presented in this section. Means and standard deviations of the 1974 student outcome measures are given in Table 2-3 for the elementary school data and in Table 2-4 for the high school data. Intercorrelations among the student outcome measures are presented in Table 2-5 for the fifth grade and in Table 2-6 for the tenth grade.

The scale for race-relations outcomes ranged from -2.00 to +2.00. The positive end of the scales is the more favorable outcome. Elementary school means ranged from a low of -1.33 to a high of +1.83 for race-relations outcomes. High school means ranged from a low of -1.71 to a high of 1.68. The achievement sum is the total of the five subtests of the Survey Test of Educational Achievement. The possible range of scores is from zero to 57. Elementary school achievement score means ranged from 20.00 to 49.00. High school achievement score means ranged from 13.00 to 43.33.

Means and Standard Deviations

In the elementary schools, racial attitudes of black and white students are reasonably similar, but white students perceive racial attitudes in the school to be more positive than do black students. In high schools, black students express racial attitudes that are more positive on the average than do white students. However, black students perceive the schools to be less fair to students and somewhat less positive in racial attitude. These results suggest that discrimination and poor race relations are more likely to be viewed as a problem by black students than by white students in both elementary and high schools. In high schools, black students report more interracial contact than do white students. This finding reflects the fact that in most of the schools in the study, black students are in the minority. Therefore, there is more opportunity and more necessity for black students to experience interracial contact. In both elementary and high schools, mean achievement scores of black students are substantially lower than those of white students.

Relationships between Black and White Measures

In Tables 2-5 and 2-6 the coefficients without parentheses are zero-order correlations. Those in parentheses are partial correlation coefficients.

At the elementary school level black student and white student measures of both perceived school racial attitude and student racial attitude are positively correlated. This indicates (a) that schools perceived by black students as manifesting positive racial attitudes tend to be perceived similarly by white students, and (b) in schools where one race tends to have positive racial attitudes, so does the other race. The black and white student achievement measures are also positively correlated indicating that where one race is achieving, so is the other. These relationships hold true whether or not background variables are partialed out.

In Table 2-6, the underlined coefficients identify the variables in which black and white students responded to the same measures. There is significant consistency in black and white measures of perceived school racial attitude. On the other hand, unlike in elementary schools, there is no relationship between the personal racial attitudes of black and white students. That is, in high schools, the racial attitudes of white students do not predict the racial attitudes of black students, and vice versa. Interracial contact reported by black and white students is significantly correlated, and the correlation increases substantially when background variables are partialed out. There is also a positive relationship between the school fairness measures of black and white students both

Table 2-3

Fifth Grade

Means and Standard Deviations of 1974 Race Relations and Achievement Outcomes

	N	Black Students		White Students	
		Mean	S.D.	Mean	S.D.
Perceived School Racial Attitude	94	.64	.39	.85	.30
Student Racial Attitude	94	1.17	.39	1.26	.39
Achievement Sum	76	28.75	5.46	38.42	4.47

Table 2-4

Tenth Grade

Means and Standard Deviations of 1974 Race Relations and Achievement Outcomes

	N	Black Students		White Students	
		Mean	S.D.	Mean	S.D.
Perceived School Racial Attitude	71	.11	.45	.20	.44
Student Racial Attitude	71	.96	.35	.54	.47
Racial Contact	71	.10	.49	-.28	.54
School Fairness	71	.15	.39	.52	.37
Achievement Sum	61	22.90	5.33	34.58	5.03

Table 2-5

Fifth Grade

Correlations and Partial Correlations Among 1974 Student Outcome Measures[a]

	Black Students			White Students		
	Perceived School Racial Attitude	Student Racial Attitude	Student Achievement	Perceived School Racial Attitude	Student Racial Attitude	Student Achievement
	(B1)	(B2)	(B3)	(W1)	(W2)	(W3)
B1	– –	.38** (.46**)	.08 (.09)	.53** (.46**)	.33** (.44**)	.19 (.18)
B2		– –	.28* (.30**)	.21 (.20)	.46** (.41**)	.13 (.18)
B3			– –	-.12 (-.24*)	.33** (.22*)	.50** (.38**)
W1				– –	.39** (.37**)	.15 (.09)
W2					– –	.14 (.09)
W3						– –

[a] N=76 schools with achievement and race relations data. Partial correlations are in parentheses. The following background variables were partialed:

Black Student SES
White Student SES
Percent Black Students
Percent Urban
North/South Location

*p≤ .05 level
**p≤ .01 level

Table 2-6

Tenth Grade

Correlations and Partial Correlations among 1974 Student Outcome Measures [a,b]

	Black Students					White Students				
	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
	(B1)	(B2)	(B3)	(B4)	(B5)	(W1)	(W2)	(W3)	(W4)	(W5)
B1	- -	.35** (.29*)	-.06 (.09)	.48** (.46**)	-.23 (-.08)	.48** (.52**)	.17 (.33**)	.17 (.23)	-.08 (.04)	-.19 (.00)
B2		- -	.35** (.49**)	.36** (.33**)	.04 (.09)	.09 (.10)	-.03 (.06)	.19 (.23)	.02 (.11)	.13 (.22)
B3			- -	.01 (.12)	.12 (.11)	.01 (.03)	.25* (.26*)	.30* (.48**)	.18 (.17)	.14 (.12)
B4				- -	.19 (.25*)	.24 (.30*)	.22 (.26*)	.21 (.20)	.33** (.37**)	.10 (.15)
B5					- -	-.18 (-.09)	.10 (.00)	.15 (.05)	.23 (.19)	.32** (.21)
W1						- -	.35** (.59**)	.01 (.35**)	.18 (.22)	-.05 (-.02)
W2							- -	.66** (.66**)	.39** (.36**)	.30* (.29*)
W3								- -	.14 (.20)	.10 (.14)
W4									- -	.69** (.68**)
W5										- -

[a] N = 60 schools with race relations and achievement data.

Partial correlations are in parentheses. The following background variables were partialed:
Black Student SES
White Student SES
Percent Black Students
Percent Urban
North/South Location

*p <.05
**p <.01

before and after controlling for background variables. Achievement scores of black and white high school students are significantly related to one another before correcting for background variables but not after correcting.

Intercorrelations among Measures

At the elementary school level, personal racial attitudes and perceived school racial attitudes are positively correlated for both black and white students. This indicates that students in elementary schools, regardless of their race, tend to perceive their own racial attitudes and those of other people in the school as similar. Schools characterized by positive student attitudes are also characterized by positive attitudes on the part of others, as perceived by students. Black student achievement is also significantly correlated with the personal racial attitudes of both black and white students. This congruence between attitudinal and achievement outcomes has implications for policy and planning and strengthens the assumption that school practices can be found which are relevant to both kinds of outcomes.

In high schools, partial correlations indicate that perception of school racial attitude by white students is more closely related to their own racial attitude and racial contact than it is for black students. Thus, when background variables are controlled, white students are more likely than black students to see the predominant racial attitude of the school as similar to their own racial attitude and racial contact. This is not true for zero-order correlations; when background variables are not controlled, student racial attitudes are unrelated to racial contact, and are related to perceived school racial attitudes similarly for black and white students. For black students, positive school racial attitudes are associated with their perception of school fairness to a greater degree than is true for white students.

For white high school students, personal racial attitude and racial contact are very closely related when background variables are controlled. The correlation is high enough that, for white students, these variables may be considered alternative measures of the same variable. In schools where white students express positive racial attitudes, they also report substantial racial contact.

This relationship is positive but considerably less pronounced for black students. Racial contact is associated with the students' own racial attitude, but is apparently determined less exclusively by racial attitude for black students than for white students.

The fairness measure is more closely related to racial descriptors of the school for black students than for white students. As reported earlier, it is, for black students, significantly related to perception of school racial attitude. It also has a small, but significant, relationship to white students' racial attitudes and their perception of school racial attitudes.

Achievement is significantly related to perception of school fairness; the partial correlation is substantial for white students and low but significant for black students. White students' achievement is significantly correlated with white students' racial attitudes, before correction for background variables, but the partial correlation is not significant.

Implications

The fact that elementary school measures of race relations tend to be positively correlated across the races suggests that, in elementary school, determinants of race relations tend to work similarly for black and white students. This leads to the expectation that school practices that are effective for improving outcome measures for one race will also be effective for improving them for the other race. There is sufficient independent variance in the measures to permit identification of independent contributors to the outcomes, but there is also reason to anticipate some consistency in determinants.

The situation is more complicated at the high school level. The racial attitudes expressed by black and white students are not related across schools. This suggests that different factors determine racial attitudes for black and white students. Educational policy and strategy may need to be based on different actions to improve black and white racial attitudes. On the other hand, black and white reports of school racial attitude are in better agreement.

The presence of association between black and white racial attitudes at the elementary level and the lack of such association at the high school level suggest that there are different social factors operating among the two age groups. The samples in this study were selected by sampling classrooms (fifth grade classrooms in elementary schools and tenth grade English classrooms in high schools). Therefore, the fifth graders in a given school shared a classroom and a teacher for the whole school day. The tenth graders, on the other hand, may have been together for no more than one period during the day. The fact that black and white students are in relatively greater agreement about perceived school racial attitude in elementary than in high schools may reflect this difference in amount of shared experience. Similarly, the greater similarity in personal racial attitudes may reflect greater shared school experience for the elementary school students in the sample.

It also seems plausible that for younger children the school serves as an influential shared environment. Social attitudes of both groups of students, therefore, respond to similar environmental factors at the elementary school level. For adolescents, however, the school environment becomes a less influential part of the total social environment. Cultural differences may be more likely to emerge under this circumstance. Another possibility is that the differences between high schools and elementary schools are due to the students' experience with integration. Most elementary students in this study have been in integrated schools from the beginning of their schooling. Many high school students in the sample started in segregated schools. Thus black and white elementary students have had relatively more experience in shared school environments. There remain critical questions for future research. Will the similarity of attitudes for fifth grade students persist as they grow older and go to high school, or is racial attitude increasingly susceptible to divergence as children grow older? Does increasing experience in integrated settings result in increasing convergence of racial attitudes?

Measures of School Conditions

The major sources of information about characteristics of schools are the data from principals, teachers, and guidance counselors. The principal of each school filled out a questionnaire and responded to an interview. Ten teachers from each school responded to a questionnaire. In high schools, three guidance counselors in each school filled out a questionnaire. Some of the individual items in these data sources are useful as measures of school conditions. For the most part, there is a need to group and scale items to produce a reduced number of measures of conceptually important process variables.

In constructing all measures of process variables, the responses of the ten teachers and three guidance counselors in a school were averaged to obtain school means for each school. The variables and analyses described in this section pertain to the 1974 data base.

The first step in the construction of measures of school conditions was to group teacher, principal, and guidance counselor information into conceptually meaningful categories. The classifications are presented in Tables 2-7 and 2-8.

In the case of teacher variables, this classification was aided by a prior factor analysis of teacher items.

The second step was to extract the principal components from each group of items. This analysis supplied two results. First, it revealed whether or not the group of items was unidimensional. Second, it provided a composite of the items that maximized the homogeneity of the scales. Scores were computed for schools on the first principal components of each item group. These scores are used and interpreted in the later analyses when (a) the item group is unidimensional or (b) when there is more than one principal component, but the first principal component is interpretable as a useful process variable.

Tables 2-7 and 2-8 present the loading on the first principal components of item groups. There are some differences in the relative loading of different variables. In interpreting results that involve measures of school conditions, it is important to bear in mind the specific composition of each composite, as described in Tables 2-7 and 2-8.

Table 2-7

Fifth Grade

Composition of Teacher, Student, and Principal Process Variables Including Item Descriptions and Loadings of the First Principal Component[a]

I.D.	Loading	Description	Scale Direction
T-1 Teachers' Racial Attitudes			
TQ025	.69	Black students better off in mixed schools	high = yes
26	.83	White students better off in mixed schools	high = yes
62	.63	The amount of prejudice is exaggerated	low = agreement
63	-.84	Like to live in integrated neighborhood	low = agreement
64	-.47	Civil Rights: More good than harm	low = agreement
65	.80	Blacks and whites should not intermarry	high = agreement
66	.83	Black failure due to white restriction	high = agreement
T-2 Support for Integration			
TQ187	.75	Students like desegregation	high = no
188	.89	Principal likes desegregation	high = no
189	.86	Superintendent likes desegregation	high = no
190	.89	White teachers like desegregation	high = no
191	.89	Black teachers like desegregation	high = no
T-3 Absence of Tension			
TQ165	-.82	Evaluate desegregation	low = no problems
166	.60	More fighting since desegregation	high = no
172	.67	Tenseness between black and white students	high = no
47	.61	The school atmosphere is tense	high = no
176	.58	White discipline problems	high = low %
177	.71	Black discipline problems	high = low %
T-4 Teachers' Job Attitudes			
TQ041	.69	Just too much work to do	high = no
43	.40	Range of ability makes teaching hard	high = no
44	.61	No one to share responsibility	high = no
46	.65	Don't have the training needed	high = no

[a] 1974 data

Table 2-7 (Continued)

Fifth Grade

T-5 Interpersonal Relations with Students

TQ253	.81	How do you and black parents get along	high = warm, open
254	.82	How do you and white parents get along	high = warm, open
255	.87	How do you and black students get along	high = warm, open
256	.85	How do you and white students get along	high = warm, opwn
261	.68	How do black and white students get along	high = warm, open

T-6 Interpersonal Relations among Teachers

TQ251	.87	How do you and black teachers get along	high = warm, open
252	.77	How do you and white teachers get along	high = warm, open
260	.92	How do black and white teachers get along	high = warm, open

T-7 Interpersonal Relations of Principal

TQ250	.86	How do you and the principal get along	high = warm, open
257	.88	How do the principal and teachers get along	high = warm, open
258	.91	How do principal & black students get along	high = warm, open
259	.92	How do principal & white students get along	high = warm, open

T-8 School Autonomy

First Principal Component Correlations

TQ262	-.62	Influence of school board	high = much
263	-.63	Influence of superintendent	high = much
266	.68	Influence of black teachers	high = much
267	.83	Influence of white teachers	high = much
269	.83	Influence of black students	high = much
270	.82	Influence of white students	high = much
271	.72	Influence of black parents	high = much
272	.55	Influence of white parents	high = much

T-9 Teacher Autonomy

TQ242	.55	Choice of jobs in this school	high = a lot
244	.38	Choice of kinds of students	high = a lot
245	.78	Choice of textbooks	high = a lot
247	.68	Choice of own routine	high = a lot
248	.74	Choice of own teaching style	high = a lot
268	.68	Your influence	high = a lot

Table 2-7 (Continued)

Fifth Grade

T-10 Inequality of Black and White Students

TQ273	.35	Unequal support for deseg: B & W teachers	high = bad
274	.39	Unequal friendliness: B & W teachers	high = bad
276	.03	Unequal friendliness: B & W students	high = bad
277	.68	Unequal friendliness: Prnts. B & W students	high = bad
278	.75	Unequal influence: B & W teachers	high = bad
279	.75	Unequal influence: B & W students	high = bad
280	.72	Unequal influence: B & W parents	high = bad
281	.22	Unequal school mix for B & W students	high = bad
282	.38	Unequal black and white discipline problems	high = bad
283	.48	Unequal B & W grade level performance	high = bad
284	.62	Unequal teacher fairness	high = bad

T-11 Perceived Racial Differences

TQ218	.60	Black and white boys:	Activity level	low = no difference
219	.77		Read better	low = no difference
220	.55		Musical	low = no difference
221	.68		Athletic	low = no difference
222	.72		Adjusted to school	low = no difference
223	.83		Quicker to catch on	low = no difference
224	.78		More attentive	low = no difference
225	.64		Like to learn better	low = no difference
226	.76		Get along better	low = no difference
227	.80		Achievement oriented	low = no difference
228	.76		Cause more trouble	low = no difference
229	.80		Need more help	low = no difference
230	.75	Black and white girls:	Activity level	low = no difference
231	.82		Read better	low = no difference
232	.66		Musical	low = no difference
233	.73		Athletic	low = no difference
234	.77		Adjusted to school	low = no difference
235	.86		Quicker to catch on	low = no difference
236	.82		More attentive	low = no difference
237	.66		Like to learn better	low = no difference
238	.75		Get along better	low = no difference
239	.82		Achievement oriented	low = no difference
240	.62		Cause more trouble	low = no difference
241	.79		Need more help	low = no difference

Table 2-7 (Continued)

Fifth Grade

T-12 Desegregation Process

TQ167	.10	Minority groups demand ethnic studies	low = yes
168	.66	All students learning more	low = yes
170	.71	White students becoming less prejudiced	low = yes
171	.86	New educational programs improving schools	low = yes

T-13 Teaching Style -1

TQ130	.79	Time spent warning students	high = often
131	.43	Time spent giving directions	high = often
132	-.24	Time spent praising	high = often
133	.63	Time spent scolding	high = often
031	-.40	Preparation time	low = none
032	-.01	Others ask advice of you	low = often
038	-.67	Projects on intergroup problems	low = no
039	.60	Class discussion about race	high = never

T-14 Teacher Training

TQ028	.95	Amount of in-service training	high = much
173	.90	Had training this year	high = yes
174	-.16	Evaluation of training	low = valuable
175	.27	Training changed thinking	high = yes

T-15 Achievement Orientation

TQ042	.80	Many students won't try to learn	low = yes
178	-.75	Number of white students at grade level	low = many
179	-.78	Number of black students at grade level	low = many
204	.54	Achievement grouping of classrooms	low = helpful
205	.59	Achievement grouping within classes	low = helpful

T-16 Race Relations Practices

TQ038	-.84	Projects on intergroup problems	low = no
39	.82	Class discussion on race	low = often
56	-.51	Number of years with students of other races	high = many
37	.59	Multi-ethnic texts	low = yes
167	.54	Demand for ethnic studies	low = yes

Table 2-7 (Continued)

Fifth Grade

T-17 Evaluation of School Services

TQ195	.84	Guidance Counselors	low = helpful to race relations
196	.81	Social workers	low = helpful to race relations
197	.68	Teacher aides	low = helpful to race relations

T-18 Evaluation of Human Relations Programs

TQ210	.61	Parent-teacher contact	low = helpful to race relations
211	.84	Intergroup relations: students	low = helpful to race relations
212	.79	Intergroup relations: teachers	low = helpful to race relations

T-19 Evaluation of Instructional Programs

TQ198	.59	Teacher training	low = helpful to race relation
199	.56	Remedial reading	low = helpful to race relation
200	.48	Vocational training	low = helpful to race relation
202	.69	Classes for underachievers	low = helpful to race relation
203	.59	Classes for the maladjusted	low = helpful to race relation
204	.62	Achievement grouping of classrooms	low = helpful to race relation
205	.71	Achievement grouping within classes	low = helpful to race relation
209	.38	Tutoring programs	low = helpful to race relation

T-20 Extra time on task

ET001	.15	Team teaching	low = yes
03	.90	Extra time on reading	low = no
04	.91	Extra time on math	low = no

T-21 Teacher vs. Child-Centered Attitudes

ET008	.62	Regular routine	high = agreement
09	-.56	Students work best at what they prefer	high = agreement
10	.72	Sit still; pay attention	high = agreement
11	.01	Praise is best	high = agreement
12	-.54	Explore environment	high = agreement
13	.73	Textbooks important	high = agreement
14	-.29	Less structure; more discovery	high = agreement
15	.82	Quiet,orderly classroom	high = agreement
16	-.66	Busy, active,noisy classroom	high = agreement
17	-.54	Students should express feelings	high = agreement

Table 2-7 (Continued)

Fifth Grade

T-22 Structure

ET005	.71	Students must raise hands to talk	high = no
22	.68	Individual instruction	high = yes
23	-.84	Free student movement	high = no
24	-.77	Noise level	high = quiet
TQ249	.73	School strictness	high = easy going

T-23 Teaching Style-2

TQ130	.72	Time spent warning students	high = often
131	.74	Time spent giving directions	high = often
132	.35	Time spent praising	high = often
133	.74	Time spent scolding	high = often
134	.50	Time spent in class discussion	high = often

S-1 Racial Contact Practices (B)

ES017B	.64	Studied about black people	low = yes
42B	.76	Racial mix at play	low = yes
43B	.70	Racial mix at work assignment	low = yes

S-2 Racial Contact Practices (W)

ES017W	.60	Studied about black people	low = yes
42W	.78	Racial mix at play	low = yes
43W	.79	Racial mix at work assignment	low = yes

P-1 Principal's Racial Attitude

PI221	.54	Black students better off in mixed schools	high = yes
222	.73	White students better off in mixed schools	high = yes
223	.61	Black failure due to white restrictions	high = agreement
224	.73	The amount of prejudice is exaggerated	low = agreement
225	-.49	Like to live in an integrated neighborhood	low = agreement
226	-.48	Civil Rights: more good than harm	low = agreement
227	.67	Blacks and whites should not intermarry	low = agreement

P-2 Support for Integration

PI243	.75	Principal liking for desegregation	high = no
267	.75	White teachers like desegregation	high = no
268	.85	Black teachers like desegregation	high = no
269	.72	Your superior likes desegregation	high = no
270	.90	Superintendent likes desegregation	high = no

Table 2-7 (Continued)

Fifth Grade

P-3 Absence of Conflict Regarding Discipline

PI192	.66	Conflict between teachers and parents	high = no problem
196	.85	Conflict between teachers and administration	high = no problem
200	.78	Conflict among teachers	high = no problem
205	.76	Conflict between teachers and students	high = no problem

P-4 Absence of Conflict: Racial Issues

PI194	.88	Conflict between teachers and parents	low = serious problem
198	.83	Conflict between teachers and administration	low = serious problem
202	.91	Conflict among teachers	low = serious problem
207	.27	Conflict between teachers and students	low = serious problem
187	.17	Is there a contingency plan	high = no
190	.42	Had faculty meetings on racial issues	high = no

P-5 Absence of Conflict: Ability Grouping

PI193	.73	Conflict between teachers and parents	low = serious problem
197	.80	Conflict between teachers and administration	low = serious problem
201	.81	Conflict among teachers	low = serious problem

P-6 Absence of Conflict: Instructional Change

PI199	.92	Conflict between teachers and administration	low = serious problem
203	.92	Conflict among teachers	low = serious problem

P-7 Absence of Principal's Personal Conflict

PI209	.86	Working after school hours	low = serious problem
210	.90	Working weekends	low = serious problem
211	.93	Receiving phone calls at home	low = serious problem
212	.30	Evening functions at school	low = serious problem

P-8 School SES

PI164	.74	Percent disadvantaged	low = low percentage
166	.73	Percent of free school lunches	low = low percentage
167	-.80	Percent parents college graduates	low = low percentage
168	.70	Percent parents not beyond high school	low = low percentage
169	-.76	Percent parents professionals	low = low percentage
170	.72	Percent parents unskilled	low = low percentage
171	-.79	Percent family income over $15,000	low = low percentage
172	.80	Percent family income under $8,000	low = low percentage

Table 2-7 (Continued)

Fifth Grade

P-9 Violent Behavior			
PI229	.54	Number fights requiring treatment	low = few
230	-.01	Number of times lockers broken into	low = few
231	.84	Number of student robberies	low = few
232	.85	Number of attacks on a teacher	low = few
233	.19	Number of robberies of school property	low = few
P-10 Principal's Interpersonal Relations			
PQ125	.77	You and black teachers	high = warm, open
126	.78	You and white teachers	high = warm, open
127	.76	You and black parents	high = warm, open
128	.84	You and white parents	high = warm, open
129	.89	You and black students	high = warm, open
130	.90	You and white students	high = warm, open
P-11 Inequality			
PQ133	-.10	Unequal friendliness: B & W teachers	high = bad
134	.56	Unequal friendliness: B & W parents	high = bad
PI256	.70	Unequal attendance by B & W parents	high = bad
257	.85	Unequal black & white parent visits	high = bad
258	-.34	Unequal black & white parents sent for	high = bad
P-12 Omitted			
P-13 Principal's Job Attitude			
PI234	.72	Principal can have important effect	low = yes
235	.72	How often do you worry about work	high = often
P-14 Evaluation of Race-Relations Programs			
PQ019	.77	Minority culture courses	low = adequate
52	.77	Biracial advisory committee	low = adequate
P-15 Evaluation of Instructional Programs			
PQ010	.46	Teacher workshops	low = adequate
13	.65	Remedial reading	low = adequate
16	.66	Vocational training	low = adequate
22	.76	Classrooms for underachievers	low = adequate
25	.26	Classrooms for maladjusted	low = adequate
28	.33	Achievement grouping	low = adequate
40	.35	Tutoring program	low = adequate

Table 2-7 (Continued)

Fifth Grade

P-16 Evaluation of Human Relations Programs

PQ043	.82	Parent-teacher contact program	low = adequate
46	.86	Intergroup student relations program	low = adequate
49	.77	Intergroup teacher relations program	low = adequate

P-17 Evaluation of Services

PQ001	.74	Guidance counselors adequate	low = adequate
04	.79	Home visitor adequate	low = adequate
07	.41	Teacher aides adequate	low = adequate

Table 2-8

Tenth Grade

Composition of Teacher, Principal, and Guidance Counselor Process Variables Including Item Descriptions and Loadings of the First Principal Component[a]

I.D.	Loading	Description	Scale Direction
T-1 Teachers' Racial Attitudes			
TQ025	.53	Black students better off in mixed schools	high = yes
26	.84	White students better off in mixed schools	high = yes
62	.72	The amount of prejudice is exaggerated	low = agreement
63	-.85	Like to live in integrated neighborhood	low = agreement
64	-.47	Civil Rights: More good than harm	low = agreement
65	.88	Blacks and whites should not intermarry	high = agreement
66	.73	Black failure due to white restriction	high = agreement
T-2 Support for Integration			
TQ187	.84	Students like desegregation	high = no
188	.87	Principal likes desegregation	high = no
189	.80	Superintendent likes desegregation	high = no
190	.89	White teachers like desegregation	high = no
191	.87	Black teachers like desegregation	high = no
T-3 Absence of Tension			
TQ165	-.84	Evaluate desegregation	low = no problems
166	.73	More fighting since desegregation	high = no
172	.81	Tenseness between black and white students	high = no
47	.75	The school atmosphere is tense	high = no
176	.59	White discipline problems	high = low %
177	.74	Black discipline problems	high = low %
T-4 Teachers' Job Attitudes			
TQ041	.66	Just too much work to do	high = no
43	.62	Range of ability makes teaching hard	high = no
44	.35	No one to share responsibility	high = no
46	.60	Don't have the training needed	high = no

[a] 1974 data

Table 2-8 (Continued)

Tenth Grade

T-5 Interpersonal Relations with Students

TQ253	.82	How do you and black parents get along	high = warm, open
254	.82	How do you and white parents get along	high = warm, open
255	.82	How do you and black students get along	high = warm, open
256	.83	How do you and white students get along	high = warm, opwn
261	.38	How do black and white students get along	high = warm, open

T-6 Interpersonal Relations among Teachers

TQ251	.60	How do you and black teachers get along	high = warm, open
252	.85	How do you and white teachers get along	high = warm, open
260	.87	How do black and white teachers get along	high = warm, open

T-7 Interpersonal Relations of Principal

TQ250	.78	How do you and the principal get along	high = warm, open
257	.84	How do the principal and teachers get along	high = warm, open
258	.85	How do principal & black students get along	high = warm, open
259	.88	How do principal & white students get along	high = warm, open

T-8 School Autonomy

TQ262	-.51	Influence of school board	high = much
263	-.38	Influence of superintendent	high = much
266	.73	Influence of black teachers	high = much
267	.65	Influence of white teachers	high = much
269	.84	Influence of black students	high = much
270	.76	Influence of white students	high = much
271	.70	Influence of black parents	high = much
272	.54	Influence of white parents	high = much

T-9 Teacher Autonomy

TQ242	.49	Choice of jobs in this school	high = a lot
244	.66	Choice of kinds of students	high = a lot
245	.69	Choice of textbooks	high = a lot
247	.68	Choice of own routine	high = a lot
248	.57	Choice of own teaching style	high = a lot
268	.56	Your influence	high = a lot

Table 2-8 (Continued)
Tenth Grade

T-10 Inequality of Black and White Students

TQ273	-.02	Unequal support for deseg: B & W teachers	high = bad
274	.65	Unequal friendliness: B & W teachers	high = bad
276	.25	Unequal friendliness: B & W students	high = bad
277	.70	Unequal friendliness: Prnts. B & W students	high = bad
278	.76	Unequal influence: B & W teachers	high = bad
279	.79	Unequal influence: B & W students	high = bad
280	.75	Unequal influence: B & W parents	high = bad
281	.30	Unequal school mix for B & W students	high = bad
282	.12	Unequal black and white discipline problems	high = bad
283	.00	Unequal B & W grade level performance	high = bad
284	.51	Unequal teacher fairness	high = bad

T-11 Perceived Racial Differences

TQ218	.46	Black and white boys:	Activity level	low = no difference
219	.61		Read better	low = no difference
220	.23		Musical	low = no difference
221	.21		Athletic	low = no difference
222	.46		Adjusted to school	low = no difference
223	.75		Quicker to catch on	low = no difference
224	.49		More attentive	low = no difference
225	.64		Like to learn better	low = no difference
226	.68		Get along better	low = no difference
227	.60		Achievement oriented	low = no difference
228	.44		Cause more trouble	low = no difference
229	.63		Need more help	low = no difference
230	.64	Black and white girls:	Activity level	low = no difference
231	.75		Read better	low = no difference
232	.24		Musical	low = no difference
233	.30		Athletic	low = no difference
234	.70		Adjusted to school	low = no difference
235	.80		Quicker to catch on	low = no difference
236	.73		More attentive	low = no difference
237	.67		Like to learn better	low = no difference
238	.71		Get along better	low = no difference
239	.79		Achievement oriented	low = no difference
240	.58		Cause more trouble	low = no difference
241	.70		Need more help	low = no difference

Table 2-8 (Continued)

Tenth Grade

T-12 Desegregation Process

TQ167	-.08	Minority groups demand ethnic studies	low = yes
168	.80	All students learning more	low = yes
170	.73	White students becoming less prejudiced	low = yes
171	.87	New educational programs improving schools	low = yes

T-13 Teaching Style -1

TQ130	.74	Time spent warning students	high = often
131	.37	Time spent giving directions	high = often
132	-.15	Time spent praising	high = often
133	.76	Time spent scolding	high = often
031	-.59	Preparation time	low = none
032	.56	Others ask advice of you	low = often
038	-.26	Projects on intergroup problems	low =no
039	.45	Class discussion on race	high = never

T-14 Teacher Training

TQ028	.91	Amount of in-service training	high = much
173	.84	Had training this year	high = yes
174	-.46	Evaluation of training	low = valuable
175	.57	Training changed thinking	high = yes

T-15 Evaluation of Principal

TQ051	.84	Rate principal	low = best
163	.75	Supportive of black teachers	low = yes
164	.75	Supportive of white teachers	low = yes
185	-.07	Spoken of unfairness to black students	low = yes
186	-.16	Spoken of unfairness to white students	low = yes
264	-.72	Influence of the principal	high = most
265	-.40	Influence of the assistant principal	high = most
HT039	.02	Values college prep. over vocational ed.	low = yes

Table 2-8 (Continued)

Tenth Grade

T-16 Multi-racial Teaching

TQ037	.66	Multi-ethnic texts	low = yes
38	-.78	Projects on intergroup problems	low = no
39	.68	Class discussion on race	low = often
201	.50	Minority group history	low = helpful to race relations
213	-.05	Biracial advisory committee	low = helpful to race relations
HT025	.59	New biracial activities this year	low = yes
26	-.22	Clubs, teams integrated	low = yes
27	-.17	Official steps taken to integrate clubs	low = yes

T-17 Evaluation of School Services

TQ195	.79	Guidance counselors	low = helpful to race relations
196	.77	Social workers	low = helpful to race relations
197	.65	Teacher aides	low = helpful to race relations

T-18 Evaluation of Human-Relations Programs

TQ210	.76	Parent-teacher contact	low = helpful to race relations
211	.82	Intergroup relations: students	low = helpful to race relations
212	.84	Intergroup relations: teachers	low = helpful to race relations

T-19 Evaluation of Instructional Programs

TQ198	.24	Teacher training	low = helpful to race relations
199	.56	Remedial reading	low = helpful to race relations
200	.62	Vocational training	low = helpful to race relations
202	.75	Classes for underachievers	low = helpful to race relations
203	.62	Classes for the maladjusted	low = helpful to race relations
204	.66	Achievement grouping of classrooms	low = helpful to race relations
205	.58	Achievement grouping within classes	low = helpful to race relations
209	.31	Tutoring programs	low = helpful to race relations

T-20 Teaching Style -2

TQ130	.87	Time spent warning students	high = often
131	.50	Time spent giving directions	high = often
132	.13	Time spent praising	high = often
133	.86	Time spent scolding	high = often
134	-.08	Time spent in class discussion	high = often

Table 2-8 (Continued)
Tenth Grade

P-1 Principal's Racial Attitude

PI221	.54	Black students better off in mixed schools	high = yes
222	.64	White students better off in mixed schools	high = yes
223	.76	Black failure due to white restrictions	high = agreement
224	.58	The amount of prejudice is exaggerated	low = agreement
225	-.65	Like to live in an integrated neighborhood	low = agreement
226	-.08	Civil Rights: more good than harm	low = agreement
227	.75	Blacks and whites should not intermarry	low = agreement

P-2 Support for Integration

PI243	.57	Principal liking for desegregation	high = no
267	.78	White teachers like desegregation	high = no
268	.83	Black teachers like desegregation	high = no
269	.71	Your superior likes desegregation	high = no
270	.87	Superintendent likes desegregation	high = no

P-3 Absence of Conflict Regarding Discipline

PI192	.68	Conflict between teachers and parents	high = no problem
196	.85	Conflict between teachers and administration	high = no problem
200	.87	Conflict among teachers	high = no problem
205	.76	Conflict between teachers and students	high = no problem

P-4 Absence of Conflict: Racial Issues

PI194	.77	Conflict between teachers and parents	low = serious problem
198	.81	Conflict between teachers and administration	low = serious problem
202	.74	Conflict among teachers	low = serious problem
207	.41	Conflict between teachers and students	low = serious problem
187	.44	Is there a contingency plan	high = no
190	.61	Had faculty meetings on racial issues	high = no

P-5 Absence of Conflict: Ability Grouping

PI193	.79	Conflict between teachers and parents	low = serious problem
197	.90	Conflict between teachers and administration	low = serious problem
201	.81	Conflict among teachers	low = serious problem

P-6 Absence of Conflict: Instructional Change

PI199	.92	Conflict between teachers and administration	low = serious problem
203	.92	Conflict among teachers	low = serious problem

Table 2-8 (Continued)

Tenth Grade

P-7 Absence of Principal's Personal Conflict

PI209	.91	Working after school hours	low = serious problem
210	.95	Working weekends	low = serious problem
211	.88	Receiving phone calls at home	low = serious problem
212	.09	Evening functions at school	low = serious problem

P-8 School SES

PI164	.61	Percent disadvantaged	low = low percentage
166	.74	Percent of free school lunches	low = low percentage
167	-.67	Percent parents college graduates	low = low percentage
168	.50	Percent parents not beyond high school	low = low percentage
169	-.55	Percent parents professionals	low = low percentage
170	.81	Percent parents unskilled	low = low percentage
171	-.68	Percent family income over $15,000	low = low percentage
172	.82	Percent family income under $8,000	low = low percentage

P-9 Violent Behavior

PI229	.72	Number fights requiring treatment	low = few
230	.42	Number of times lockers broken into	low = few
231	.54	Number of student robberies	low = few
232	.74	Number of attacks on a teacher	low = few
233	.78	Number of robberies of school property	low = few

P-10 Principal's Interpersonal Relations

PI124	.59	You and administration	high = warm, open
125	.83	You and black teachers	high = warm, open
126	.78	You and white teachers	high = warm, open
127	.72	You and black parents	high = warm, open
128	.73	You and white parents	high = warm, open
129	.79	You and black students	high = warm, open
130	.80	You and white students	high = warm, open

P-11 Inequality

PQ133	.25	Unequal friendliness: B & W teachers	high = bad
134	.52	Unequal friendliness: B & W parents	high = bad
PI256	.72	Unequal attendance by B & W parents	high = bad
257	.84	Unequal black & white parent visits	high = bad
258	.74	Unequal black & white parents sent for	high = bad

Table 2-8 (Continued)

Tenth Grade

P-12 Omitted

P-13 Principal's Job Attitude

PI234	.77	Principal can have important effect	low = yes
235	.77	How often do you worry about work	high = often

P-14 Evaluation of Race-Relations Programs

PQ019	.71	Minority culture courses	low = adequate
52	.71	Biracial advisory committee	low = adequate

P-15 Evaluation of Instructional Programs

PQ010	.53	Teacher workshops	low = adequate
13	.38	Remedial reading	low = adequate
16	.40	Vocational training	low = adequate
22	.73	Classrooms for underachievers	low = adequate
25	.68	Classrooms for maladjusted	low = adequate
28	.60	Achievement grouping	low = adequate
40	.61	Tutoring program	low = adequate

P-16 Evaluation of Human-Relations Programs

PQ043	.65	Parent-teacher contact program	low = adequate
46	.90	Intergroup student relations program	low = adequate
49	.90	Intergroup teacher relations program	low = adequate

P-17 Evaluation of Services

PQ001	.77	Guidance counselors adequate	low = adequate
04	.78	Home visitor adequate	low = adequate
07	.03	Teacher aides adequate	low = adequate

C-1 Counselors' Racial Attitudes

GC064	-.76	The amount of prejudice is exaggerated	low = agreement
65	.71	Like to live in integrated neighborhood	low = agreement
66	.48	Civil Rights: more good than harm	low = agreement
67	-.77	Blacks and whites should not intermarry	low = agreement
68	.75	Black failure due to white restrictions	high = agreement

Table 2-8 (Continued)

Tenth Grade

C-2 Rules and Discipline

GC108	.66	Skipping:	student spoken to	high = often
109	.78		parents informed	high = often
110	.65		parent conference	high = often
111	.23		privileges restricted	high = often
112	.15		kept after school	high = often
113	-.04		suspended	high = often
115	-.09		dropped	high = often
116	-.76		nothing done	high = often
117	.72	Rules enforced:	disruptive behavior	high = strictly
118	.81		destroying property	high = strictly
119	.49		dress code violations	high = strictly
120	.72		cutting classes	high = strictly
121	.43		smoking cigarettes	high = strictly
122	.71		fighting	high = strictly
123	.44		drug use	high = strictly
124	.53		back talk	high = strictly
125	.52		weapons	high = strictly

C-3 Guidance Counselor Duties

GC127	.57	Percent time spent scheduling	high = a lot
128	.50	Percent time handling discipline	high = a lot
130	-.92	Percent time academic counseling	high = a lot
131	.36	Percent time personal counseling	high = a lot

C-4 Perceived Racial Differences

GC182	.57	B & W boys:	Activity level	low = no difference
183	.63		Successful in academics	low = no difference
184	.54		Better - vocational	low = no difference
185	.36		Athletes	low = no difference
186	.67		Adjusted in school	low = no difference
187	.60		Better - business courses	low = no difference
188	.45		Pay more attention	low = no difference
189	.34		Like to counsel	low = no difference
190	.48		Get along better socially	low = no difference
191	.68		More achievement oriented	low = no difference
192	.58		Cause more trouble	low = no difference
193	.46		Need more help	low = no difference

Table 2- 8 (Continued)

Tenth Grade

C-4 (Continued)

GC194	.54	B & W girls:	Activity level	low = no difference
195	.62		Successful in academics	low = no difference
196	.61		Better - vocational	low = no difference
197	.42		Athletes	low = no difference
198	.63		Adjusted in school	low = no difference
199	.53		Better - business courses	low = no difference
200	.61		Pay more attention	low = no difference
201	.29		Like to counsel	low = no difference
202	.40		Get along better socially	low = no difference
203	.58		More achievement oriented	low = no difference
204	.58		Cause more trouble	low = no difference
205	.42		Need more help	low = no difference

C-5 Evaluation of Facilities

GC207	.65	Gym	high = good
209	.55	Media Center	high = good
210	.65	Language Lab	high = good
211	.76	Science Lab	high = good
213	.27	Computer Lab	high = good
214	.80	Arts & Crafts facilities	high = good
215	.76	Glee Club facilities	high = good
217	.78	Theatre Arts facilities	high = good
218	.58	Home Economics	high = good
219	.68	Typing facilities	high = good
221	.70	Work-Study programs	high = good
222	.51	Auto Mechanics facilities	high = good
223	.52	Woodworking facilities	high = good

C-6 Counseling Practices

GC270	.41	Students helped to plan own programs	high = often
273	.82	Discipline problems sent to other schools	high = often
276	-.61	Students choose own counselor	high = often

Table 2-8 (Continued)

Tenth Grade

C-7 Interpersonal Relations of Principal

GC296	.78	How do you and the principal get along	high = warm, open
303	.86	How do principal and teachers get along	high = warm, open
304	.94	How do principal and B students get along	high = warm, open
305	.94	How do principal and W students get along	high = warm, open

C-8 Interpersonal Relations with Teachers

GC297	.87	How do you and black teachers get along	high = warm, open
298	.89	How do you and white teachers get along	high = warm, open
306	[illegible]	How do black & white teachers get along	high = warm, open

C-9 Interpersonal Relations: Parents, Students

GC299	.82	How do you and black parents get along	high = warm, open
300	.80	How do you and white parents get along	high = warm, open
301	.70	How do you and black students get along	high = warm, open
302	.67	How do you and white students get along	high = warm, open
307	.62	How do black and white students get along	high = warm, open

C-10 Evaluation of Race-Relations Programs

GC253	.81	Minority culture courses	low = helpful
265	.81	Biracial advisory committee	low = helpful

C-11 Evaluation of Instructional Programs

GC250	.32	Teacher workshops	low = helpful
251	.66	Remedial reading	low = helpful
252	.74	Vocational training	low = helpful
254	.76	Classrooms for underachievers	low = helpful
255	.63	Classrooms for maladjusted	low = helpful
256	.45	Achievement grouping of classrooms	low = helpful
257	.51	Achievement grouping within classes	low = helpful
261	.66	Tutoring program	low = helpful

C-12 Evaluation of Human-Relations Programs

GC262	.84	Parent-contact program	low = helpful
263	.85	Student intergroup relations	low = helpful
264	.67	Teacher intergroup relations	low = helpful

C-13 Evaluation of Services

GC247	.76	Guidance counselors	low = helpful
248	.78	Social worker	low = helpful

All of the teacher composites are based on the pooled responses of the 10 teachers in each school. Schools vary on these composites according to the mean responses of the sample of teachers. At the elementary school level the sample of teachers usually covers all of the fifth grade teachers in the school, and some fourth and third grade teachers. Therefore, the teacher sample is likely to include the teachers with the greatest influence on the sampled students. At the high school level, the sample of teachers is drawn from a more diverse population. There is no necessary connection between the sampled high school teachers and the sampled high school students. Therefore, at the high school level, the teacher measures should be thought of as an estimate of predominant teacher responses throughout the school. At the elementary school level, teacher responses are more direct measures of the teachers who interact with the sampled students.

The composite teacher variables are presented first in Tables 2-7 and 2-8. Those tables show, for each component variable, the source in the teacher questionnaire, a brief description, an indication of the direction in which it is scored, and its loading on the first principal component of the group of items to which it is assigned. Loadings on first principal components are shown separately for high schools and elementary schools.

In interpreting results, it is necessary to examine the way in which each composite is constructed. The composites have been given names reflecting the authors'interpretations of the content. It will be noted (a) that items in a composite are not equally weighted, (b) that although an item was assigned to a particular group of items, it may carry a zero weight in constructing the composite, and (c) that composites for elementary and high schools may reflect different patterns of weights.

To facilitate interpretations of relationships it may be useful to place measures of school conditions into superordinate categories. The following general description of process variables is intended to facilitate an overview of the entire range of school conditions.

Teacher Measures

Twenty-three composites of teacher responses were constructed at the elementary school level; twenty composites were constructed at the high school level. The composites include teachers' responses to items having to do with (a) the teachers' self-descriptions, (b) teachers' descriptions of the social climate of the school, (c) teachers' reports concerning the climate for desegregation in the school, (d) teachers' evaluations of school conditions, and (e) descriptions of teaching practices.

Teacher characteristics. These variables are based on teachers' descriptions of themselves. Aggregated to the school level, they provide summary measures of responses for the teachers in the sample. Thus schools vary according to averaged teacher characteristics. In both the high school and elementary school samples, the following composites of teacher self-descriptions were formed: Teachers' racial attitudes (T-1) is defined by statements of personal racial attitudes. Teacher job attitudes (T-4) refers to statements about the difficulty of the job and about feelings of competence. Perceived racial differences (T-11) is a composite measure reflecting the degree to which black and white students are perceived to differ on 24 different attributes. Teacher training (T-14) refers to the amount and quality of training that teachers reported receiving. (Note that quality of training is more strongly weighted in this composite at the high school than at the elementary school level.)

Social climate of the school. Several questions in the questionnaires asked for descriptions of social interactions in the school. The response categories were (a) open, warm (often interact), (b) friendly, (c) polite, (d) distant, cool (seldom interact), and (e) hostile. In fact, the "hostile" response category was rarely used. Variation in these items seems to describe social relationships ranging from close and personal to distant and formal (rather than hostile). These interpersonal relations items were grouped into three composites: those referring to interpersonal relations with students and their parents (T-5); those referring to interpersonal relations among teachers (T-6); and those referring to the interpersonal relations of the principal (T-7). Two other composites that reflect social climate have to do with how influence is distributed. School autonomy (T-8) measures the relative influence of teachers and students as opposed to external forces (superintendents and school boards). Teacher autonomy (T-9) reflects the amount of choice and influence that teachers perceive themselves to have.

Climate for desegregation. These composites reflect facets of social climate that are specifically related to racial desegregation. Support for integration (T-2) describes how teachers perceive how well school participants like desegregation. Absence of tension includes items describing general tension, but is most closely defined by lack of racial tension and problem-free integration. The description of the desegregation process (T-12) describes the degree to which desegregation is characterized by greater learning, reduced prejudice and improvement in education.

The composite entitled inequality of black and white participants was based on a number of items that asked for estimates of characteristics of various persons in the school (students, parents, teachers). Characteristics included influence in the school, support for desegregation, friendliness, and discipline problems. The indicators in this composite were formed by taking the absolute difference in scale values assigned to black and white participants for the several items. The variables that carry major weight in both the elementary and high school composites assess differences in influence between black and white teachers, students, and parents.

Evaluation of the school and school programs. These composites reflect evaluations of school programs and facilities as helpful to race relations. The items are grouped into *evaluations of school services* (T-17; e.g., guidance counselors, social workers), *evaluations of human-relations programs* (T-18), and *evaluations of instructional programs* (T-19). At the high school level there is a composite representing *evaluation of the principal* (T-15).*

Instructional methods. Several composites were formed for *elementary schools* to measure variation in teaching methods and classroom practices. *Teaching style* (T-13 and T-23), varies from an emphasis on warning and scolding to an emphasis on praising and class discussion. *Race-relations practices* (T-16) are practices that specifically use race-related material and racial interaction in teaching. *Extra time on task* (T-20) refers to additional time spent on reading and mathematics by low-achieving students. *Teacher vs. child-centered attitudes* (T-21) measures variation in preference for orderly classrooms and regular routines as compared to busy, active classrooms and student self-expression. Structure (T-22) refers to descriptions of schools as characteristically stressing strictness and control as compared to student movement and noise.

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*This composite was not used at the elementary school level because the items did not yield an interpretable first principal component.

At the high school level, there are two composites relating to instructional methods. Multi-ethnic teaching (high school T-16) refers to specific use of multi-ethnic curriculum material, projects, and activities. Teaching style (T-20) is similar to the elementary school teacher composite (T-23).

Principal Measures

The composites of principal variables in many cases parallel teacher composites and may be described briefly. In addition to measures descriptive of personal characteristics of principals, social climate, climate for desegregation, and evaluation of school programs, a set of items in the principal's interview probed sources and severity of conflict in the school.

Personal characteristics of principals. Principals' racial attitudes (P-1) were measured by the same questions asked of teachers. Principals' job attitudes refer to worrying about work and potential effect of the principal.

Social climate. The principals' self-reported personal relationships with administrators, teachers, parents, and students--varying from warm and personal to distant and formal--are represented in the composite labeled principals' interpersonal relationships (P-10).

Climate for desegregation. Support for integration (P-2) contains similar questions to the comparable teacher composite. Inequality of black and white parent participation was formed by the methods described for defining teacher composite (T-10). In this case, the content refers to the participation of black and white parents in school affairs.

Evaluation of school programs. Principals evaluated the adequacy of a variety of programs and services in their schools. For purposes of forming composites, the programs and services were grouped into race relations programs (P-14), instructional programs (P-15), human relations programs (P-16) and services (P-17). It will be noted that principals evaluated programs with regard to adequacy, while teachers evaluated them with regard to helpfulness for race relations.

Absence of conflict. A series of questions in the principals' interview dealt with the presence and seriousness of conflict among various persons (e.g., teachers and parents, administrators, and students) related to several issues (e.g., racial issues, discipline). The composites group together answers referring to particular persons according to the issues identified. The composites are absence of conflict regarding discipline (P-3), racial issues (P-4), ability grouping (P-5), and instructional change (P-6). Another group of items referred to the principals' personal conflict (P-7) between family and duties.

There are two additional principal composites. School socioeconomic status (P-8) is composed of principals' estimates of percentages of the school population with particular socioeconomic characteristics. Violent behavior (P-9) describes instances of fighting and criminal behavior.

Guidance Counselor Measures

Personal characteristics of guidance counselors reflected in composite measures include counselors' racial attitudes (C-1) and perceived racial differences (C-4). Both are defined similarly to the related teacher measures. There are also guidance counselor composites paralleling teacher composites having to do with the social climate of the school (C-7, C-8, and C-9).

Guidance counselor evaluations of school programs include the following composites that parallel teacher composites: evaluation of race-relations programs (C-10), instructional programs (C-11), and human-relations programs (C-12), and services (C-13). In addition, guidance counselors provided evaluations of school facilities (C-5), including labs, facilities for vocational education, and facilities for extracurricular activities.

Two composites refer specifically to the work of counselors. Guidance counselor duties (C-3) measures emphasis on academic counseling vs. discipline and scheduling. Counseling practices (C-6) refers to the schools' approaches to counseling problems. Rules and discipline (C-2) reflects variation in strictness of enforcement of school rules.

Background Measures

Characteristics of the backgrounds of students, schools, and communities must be taken into account in any effort to identify school conditions and processes of effective desegregation. This section describes the background measures employed in subsequent analyses. Particular analyses vary with regard to the particular subset of background measures employed and with regard to the method of combining background variables into composites. Therefore, specific composites are described as they bear on the analysis being presented.

In most of the analyses of this study, background measures were used for purposes of statistical control via partial correlation and regression techniques. There are instances, however, in which results having to do with background variables have important policy implications themselves. Suppose, for example, that the socioeconomic level of students affects school conditions as well as student outcomes. It is plausible that school conditions might be educationally poorer when students are economically poorer. To "correct" for student SES in interpreting associations between outcomes and school conditions is to subtract variance that might reveal beneficial changes in school conditions. A "low SES" school cannot, as a matter of policy, be excused for perpetuating school conditions that are negatively related to student outcomes on the grounds that "background" variables account for relationships among conditions and outcomes. In subsequent chapters, we call attention to several instances in which findings related to background measures have important implications for policy.

The background measures obtained in this study fall into four categories: the socioeconomic status of black and white students; the racial composition of the school; the degree to which the school district can be described as urban; and the geographical location of the schools.

Socioeconomic Status

As is characteristic of school surveys, it was not possible to obtain direct measures of the socioeconomic backgrounds of students. The measures derived from students' reports are proxies for an index of influential environmental factors.

The following items were used as indicators of the SES of elementary students.

Does the student own a bicycle?
Number of siblings.
Does the family have a telephone?
Does the family own a dictionary?
Does the family get a newspaper?
Does the family own its home?
Does the student live with both parents?
Was the student read to when little?

For high school students, there are indicators of:

Mother's education.
Mother's occupation.
Father's occupation.
Does the family get a newspaper?
Does the family own its home?
Does the student live with both parents?

The above measures were obtained from the individual students in the samples.

In addition, a school-level SES measure was derived from principal's reports of economic and occupational characteristics of the school's population (P-8). The specific items and composites are presented in Tables 2-7 and 2-8.

Racial Composition of the School

Racial composition was indexed by the percent of students in the school who are black, as reported by the principal. This variable has an obvious bearing on interracial contact of students. It may also have an effect on other student outcomes and school conditions.

Urbanness of School Districts

This variable was the percent urban of the county or city in which the school is located, as reported in the 1970 U.S. Census. Since the census data refer to counties and cities, this variable describes a school's community rather than the school itself.

Geographical Location

A school's location was coded as "Southern" or "non-Southern." All of the Southern schools were members of the 1972 Southern Schools sample (NORC, 1973). The non-Southern schools were from Northeastern, Midwestern, and Western states.

Chapter 3

School Conditions and Outcomes in Elementary Schools

The results presented in this chapter are organized into two main topics: the relationships between student socioeconomic status and other variables and the associations between elementary school characteristics and student outcomes. The set of relationships between school characteristics and outcomes is the major focus of the study. Results involving student SES provide a necessary context for interpreting the remaining results, and themselves have policy implications.

It is often assumed that SES is associated with the attitudes and achievement of students. For this reason, it is treated as a "background variable"; its effect is statistically controlled in the analysis of school characteristics and outcomes. This approach was taken in the present study. However, it is instructive to examine how SES relates to other variables. SES may affect school characteristics as well as student outcomes. The policy implications of a set of results must take such relationships into account.

Student Socioeconomic Status

The results reported in this section describe relationships as they existed in the 76 elementary schools for which both race relations and achievement data are available. Of these 76 elementary schools, 48 were located in the South and 28 outside the South.

Measures of black and white student socioeconomic status were developed by taking the first principal component of the school means of SES items from the student questionnaire separately for black and white students.

Composition of the first principal component SES scales are presented in Table 3-1. Correlations between the black and white student SES scores and the student race relations and achievement outcomes are presented in Table 3-2.

SES and Student Outcomes

Students' SES appears to be unrelated to their perception of school racial attitude for both black and white students. White students' SES appears also to be unrelated to personal racial attitudes of both black and white students. Black students' SES, however, appears to be related significantly to both black and white students' personal racial attitudes: The higher the black students' socioeconomic status, the better the personal racial attitudes of both the black students and the white students in the same schools.

Both black and white students' SES is significantly related to student achievement. The higher the black or white students' socioeconomic status, the higher their achievement scores. Also, the higher the SES of the students of one race, the better the academic achievement of the students of the opposite race.

SES and School Characteristics

Table 3-3 presents the zero-order correlations between the students' SES scores and the school process variables described in Table 2-7 in Chapter 2. Low socioeconomic status of black students is significantly associated with a substantial number of school characteristics. The results in Table 3-3 show that schools whose black students have low mean SES scores

Table 3-1

Fifth Grade

Composition of the First Principal Component SES Scales for Black and White Students

		Weights[a]	
I.D.	Description	Black	White
ES005	Own a bicycle	.44	.39
ES066	Number of siblings	.44	.36
ES026	Own a telephone	.42	.39
ES027	Own a dictionary	.35	.41
ES032	Own home	.19	.34
ES053	Get newspaper	.40	.33
ES020	Live with both parents	.29	.30
ES031	Read to when little	.20	.30

[a] 1974 Data

Table 3-2

Fifth Grade

Zero-Order Correlations between the First Principal Components of the Student SES scores and the Student Race-Relations and Achievement Outcomes

		Principal Component SES Scores[a]	
		Black	White
Perceived school racial attitude	Black	.01	.12
	White	-.09	.13
Personal racial attitude	Black	.27*	.00
	White	.38**	.04
Achievement	Black	.61**	.32**
	White	.43**	.73**

*$p < .05$ **$p < .01$

[a] 1974 Data

Table 3-3

Fifth Grade

Zero-Order Correlations between the First Principal Components of the Student SES scores and the School Process Variables

		Principal Component SES Scores[a]	
	Teacher Variables	**Black**	**White**
1.	Teachers' racial attitude	.37**	.08
2.	Support for integration	-.28*	-.08
3.	Absence of tension	-.10	.04
4.	Teachers' job attitude	-.18	-.21
5.	Interpersonal relations with students	.40**	.32**
6.	Interpersonal relations among teachers	.08	.15
7.	Interpersonal relations of principal	-.20	-.02
8.	School autonomy	.23*	.05
9.	Teacher autonomy	.14	.07
10.	Inequality	-.07	.09
11.	Perceived racial differences	-.26*	.05
12.	Desegregation process	.00	.05
13.	Teaching style (1)	-.30**	-.14
14.	Teacher training	.07	-.01
15.	Achievement evaluation	.51**	.36**
16.	Race-relations practices	-.47**	-.15
17.	Evaluation of services	.07	.11
18.	Evaluation of human-relations programs	.06	.00
19.	Evaluation of instructional programs	.27*	.10
20.	Extra time on task	.06	-.02
21.	Teacher vs. child-centered attitudes	-.27*	-.23*
22.	Structure	.20	.10
23.	Teaching style (2)	.04	-.01
	Student Variables		
1.	Racial contact practices (Black)	-.36**	-.16
2.	Racial contact practices (White)	-.31**	-.04

[a] 1974 Data

*$p < .05$ **$p < .01$

Table 3-3 (Continued)

Fifth Grade

	Principal Variables	Principal Component SES Scores[a] Black	 White
1.	Principal's racial attitude	.13	.04
2.	Support for integration	-.09	.03
3.	Absence of conflict: discipline	-.15	.20
4.	Absence of conflict: racial issues	-.07	.04
5.	Absence of conflict: ability grouping	-.14	-.06
6.	Absence of conflict: instructional change	-.07	.06
7.	Absence of Principal's personal conflict	-.36**	-.18
8.	School SES	-.60**	-.64**
9.	Violent behavior	.00	-.09
10.	Principal's interpersonal relations	-.13	.01
11.	Inequality	.20	.33**
13.	Principal's job attitude	.28*	.14
14.	Evaluation of race-relations programs	-.10	.08
15.	Evaluation of instructional programs	-.05	-.01
16.	Evaluation of human-relations programs	-.19	-.22*
17.	Evaluation of services	-.01	.01

[a] 1974 Data

* $p < .05$ ** $p < .01$

tend to have the following characteristics:

(a) Negative teacher racial attitudes (T-1)

(b) Absence of teaching practices related to race relations, including lack of class projects and discussions of race (T-16) as reported by teachers, and few practices designed to promote racial interactions, as reported by both black and white students (S-1 and S-2).

(c) Perception by teacher of differences between black and white students (T-11).

(d) A teaching style characterized by warning and scolding (T-13) and attitudes that are more teacher-centered than child-centered (T-21).

(e) Lack of support for integration, as described by teachers (T-2).

(f) Formal relations between teachers, the students, and their families (T-5).

(g) Low school autonomy relative to outside influence (T-8).

(h) Low evaluation of achievement in the school by teachers (T-15).

(i) Evaluation of certain teaching programs as helpful to race relations (T-19). These programs include achievement grouping classes for underachievers, teacher training, and classes for the maladjusted.

(j) Principal's report of conflict between the principal and principal's family about the demands of the job (P-7) and an unworried job attitude on the part of the principal (P-13).

Low SES scores for white students are significantly correlated with formal relationships between teachers and the students and their families (T-5), poor teacher evaluation of achievement (T-15), more teacher-centered than child-centered attitudes (T-21), poor school SES as reported by the principal (P-8), less inequality regarding black and white parents reported by the principal (P-11), and the poor evaluation by the principal of human relations programs (P-16).

The SES measures for both black and white students in the sample correlate with the overall school SES measures based on principals' reports (P-8).

Implications of SES Results

Some school characteristics seem to be related to student SES without regard to race. They include evaluation by teachers of school achievement, formal interpersonal relationships between teachers and students and their families, and teacher-centered rather than child-centered teacher attitudes. In low SES schools the emphasis is on regular routine, sitting still and paying attention, the importance of textbooks, and quiet orderly classrooms.

The substantial number of school characteristics which correlate with black student SES and for which there are no white student SES counterparts is disturbing. Low SES black students in elementary schools appear by these data to be in double jeopardy. Not only are racial attitudes poorer in schools with low SES black students, but the practices which might help to change those attitudes exist to a lesser degree. Such schools have fewer class discussions of race, fewer race-related projects, and fewer multi-ethnic texts. The students themselves report less racial mixing in play and work assignments.

These results are undoubtedly related to other background characteristics, such as racial composition of the schools and demographic characteristics of the communities. But as they stand they have two implications that must be considered in relation to policy. First, many of the school characteristics related to low black student SES—particularly those descriptive of teaching practices—are changeable. Evidence to be presented later indicates that they are also associated with student-measured race relations. Whatever the results in terms of student attitudes, it would appear that there is a pattern of school characteristics that discriminate against poor black students and that are subject to correction.

The second implication pertains to the practice of correcting statistical relationships between school characteristics and student achievement and attitudes to account for the relevance of background variables—as is done in the analyses presented later in this report. The variance subtracted in such a correction procedure includes variance that background variables share with school characteristics, as well as the variance that they share with outcome. When school practices vary with background variables, statistical corrections may obscure relationships that suggest approaches to corrective action. Therefore, caution in interpreting partial correlations, as compared with zero-order correlations, is necessary.

School Characteristics and Student Outcomes

This section of Chapter 3 focuses on the relationships between school characteristics and students' race-relations and achievement outcomes. An attempt will be made to identify practices which may be used to enhance students' attitudes and achievements and increase the effectiveness of integrated schools. The relationships between school characteristics variables and student outcomes are presented from three perspectives.

Zero-Order Correlations

To describe field conditions, zero-order correlations are presented in Table 3-4. Zero-order correlations between school characteristics and student outcomes provide information about relationships as they exist in elementary schools

Table 3-4

Fifth Grade

Zero-Order Correlations between School Process Variables[a] and Student Race Relations and Achievement Outcomes

	Perceived School Racial Attitude		Students' Personal Racial Attitudes		Student Achievement	
Teacher Variables	Black	White	Black	White	Black	White
1. Teachers' racial attitude	.21	.27*	.17	.53**	.19	.13
2. Support for integration	-.29**	-.27*	-.26*	-.41**	-.21	-.12
3. Absence of tension	.27*	.16	-.03	-.12	.09	.12
4. Teachers' job attitude	.20	-.14	.20	-.06	-.04	-.02
5. Interpersonal relations with students	.09	.33**	.16	.39**	.08	.22*
6. Interpersonal relations among teachers	.05	.06	-.26*	.13	-.22*	-.13
7. Interpersonal relations of principal	-.23*	.06	-.22*	-.22*	-.24*	-.12
8. School autonomy	-.16	.23*	.16	.19	-.02	-.05
9. Teacher autonomy	-.12	.22*	.09	.08	-.07	.15
10. Inequality	-.09	-.06	.00	-.19	-.08	.12
11. Perceived racial differences	-.09	-.13	-.17	-.36**	-.19	.08
12. Desegregation process	-.25*	-.22*	.03	-.04	-.03	.13
13. Teaching style (1)	-.19	-.23*	-.22*	-.43**	-.28*	-.21
14. Teacher training	.25*	.19	.09	.19	.14	.07
15 Achievement evaluation	.15	.18	.36**	.37**	.43**	.41**
16. Race relations practices	-.11	-.27*	-.45**	-.60**	-.32**	-.19
17. Evaluation of services	-.11	.15	-.02	.25*	-.01	.10
18. Evaluation of human-relations programs	-.14	-.17	-.05	-.09	.07	-.03
19. Evaluation of instructional programs	-.13	-.11	.23*	.27*	.26*	.14
20. Extra time on task	.18	.10	-.13	.05	.26*	.10
21. Teacher vs. child-centered attitudes	-.10	-.20	.02	-.27*	-.20	-.25*
22. Structure	-.17	-.10	.07	.16	.18	.08
23. Teaching style (2)	-.19	.02	.04	.01	-.05	.05
Student Variables						
1. Racial contact practices (Black)	-.20	-.10	-.25*	-.31**	-.41**	-.31**
2. Racial contact practices (White)	-.04	-.02	-.37**	-.38**	-.40**	-.23*

*p < .05 **p < .01

[a] 1974 Data

Table 3-4 (Continued)

Fifth Grade[a]

Principal Variables	Perceived School Racial Attitude		Students' Personal Racial Attitudes		Student Achievement	
	Black	White	Black	White	Black	White
Principal's racial attitude	.03	.20	.15	.31**	.13	.06
Support for integration	.00	-.11	-.09	-.17	.00	.03
Absence of conflict: discipline	.10	.27*	-.10	-.19	-.10	.16
Absence of conflict: racial issues	.07	.14	.00	.06	-.08	.06
Absence of conflict: ability grouping	-.11	-.01	-.05	-.15	-.20	-.11
Absence of conflict: instructional change	-.02	.07	-.06	-.11	-.07	.07
Absence of principal's personal conflict	-.04	.13	-.04	-.16	-.14	-.05
School SES	-.11	-.10	-.14	-.31**	-.54**	-.64**
Violent behavior	-.12	-.20	.06	-.01	-.08	-.20
Principal's interpersonal relations	-.26*	.10	-.13	-.04	-.30**	-.12
Inequality of black & white parents	-.15	-.19	-.28*	-.14	.12	.18
Principal's job attitude	.24*	.03	.03	-.03	-.01	.03
Evaluation of race-relations programs	.26*	.05	-.03	-.09	.15	.07
Evaluation of instructional programs	-.06	-.08	.03	-.01	.00	-.03
Evaluation of human-relations programs	.00	-.06	.00	-.18	-.08	-.28*
Evaluation of services	.09	.00	.12	-.07	-.13	-.09

[a] 1974 Data

$^{*}p < .05$ $^{**}p < .01$

and raise questions to be answered in further analyses. There are 60 significant zero-order correlations, but the pattern of the associations is diverse. Some school characteristics appear to be associated more with one racial group than another. Warm interpersonal relationships between teachers and the students and their families (T-5) and child-centered attitudes on the part of the teacher (T-21) are related to white students' outcomes but not black students' outcomes. More formal relationships between the principal and others in the school (P-10 and T-7) and more formal relationships among teachers (T-6) are related more to black students' outcomes than white students' outcomes. Some few variables seem so consistent across outcomes for both black and white students that particular attention in further analyses seems warranted. Support for integration (T-2), teaching style (T-13), achievement orientation (T-15), race-relations practices (T-16), and racial-contact practices (S-1 and S-2) merit special attention.

A table of correlations between school characteristics and outcomes computed for 1975 data is presented in Appendix D. Comparison of that data with Table 3-4 reveals some differences in specific relationships, but an overall pattern that is similar. In particular, relationships involving the following school characteristics are related to race-relations outcomes in 1975 as well as in 1974: support for integration (T-2), teaching style (T-13), race-relations practices (T-16), and racial-contact practices reported by white students (S-2). The latter is significantly correlated with the racial attitudes of both black and white students in 1974, but only with those of white students in 1975. The teachers' achievement evaluation (T-15) was not measured in 1975.

An attempt to perform a partial correlation analysis on 1975 data parallel to the one reported in the next section was not successful. The apparent reason was that for the smaller number of schools tested in 1975, variance among measures of background, school characteristics, and outcomes was shared to such an extent that residuals contained very high proportions of error variance. No interpretable statistical results could be obtained from this analysis.

Zero-order correlations between school characteristics and student outcomes are confounded by the presence in both sets of variables of variance due to antecedent conditions. A set of background variables was identified and used in a regression procedure to remove variance due to black students' SES, white students' SES, the percent of black students in the school, a measure of urbanness of the school district, and its location in the South or outside the South. The SES measures were based on a canonical correlation analysis to maximize the similarity of the scale to the SES scales used in the 1972 Southern Schools study. Use of these variables permitted cross-year analyses. Relative weights of each of the SES items are given in Table 3-5.

Zero-order correlations between the five background variables used for partialing and the student outcome measures are given in Table 3-6. Zero-order correlations between the background variables and the school process variables are given in Table 3-7. These tables summarize the background relationships existing in the 76 elementary schools for which both race relations and achievement data were available.

Table 3-5

Fifth Grade

Composition of the Socioeconomic Status Scales[a] for Black and White Students

I.D.	Description	Weights	
		Black	White
ES005	Own a bicycle	-.55	-.47
ES066	Number of siblings	.02	-.02
ES026	Own a telephone	.00	.48
ES027	Own a dictionary	-.12	-.09
ES032	Own home	.08	-.18
ES053	Get newspaper	-.04	-.53
ES020	Live with both parents	.24	-.36
ES031	Read to when little	-.08	-.10

[a] 1974 Data

Table 3-6

Fifth Grade

Zero-Order Correlations between Background Variables Used for Partialing and Student Race-Relations and Achievement Outcomes

		Background Variables[a]				
		Black SES	White SES	Percent Black	Percent Urban	North / South
Perceived school racial attitude	Black	-.21	.13	.21	-.25*	.06
	White	-.16	.12	.17	-.14	-.14
Personal racial attitude	Black	.00	-.08	-.06	.15	-.23*
	White	.19	-.03	-.06	.22*	-.55**
Achievement	Black	.30**	.33**	-.16	.10	-.31**
	White	.12	.60**	-.10	.18	-.16

*$p < .05$ **$p < .01$ [a] 1974 Data

Table 3-7

Fifth Grade

Zero-Order Correlations between Background Variables Used for Partialing and School Process Variables

	Background Variables[a]				
Teacher Variables	Black SES	White SES	Percent Black	Percent Urban	North/ South
1. Teachers' racial attitude	.18	.02	-.03	.36**	-.68**
2. Support for integration	-.03	.02	.04	-.11	.53**
3. Absence of tension	-.18	.12	-.13	-.19	.11
4. Teachers' job attitude	-.13	-.19	.16	-.18	.19
5. Interpersonal relations with students	.24*	.26*	-.09	.35**	-.41**
6. Interpersonal relations among teachers	.18	.08	-.10	.10	-.20
7. Interpersonal relations of principal	-.04	-.03	.07	-.13	.31**
8. School autonomy	.35**	-.01	-.11	.30**	-.47**
9. Teacher autonomy	.14	-.06	-.13	.21	-.35**
10. Inequality	-.13	.14	.13	-.10	.31**
11. Perceived racial differences	-.18	.14	.22*	-.29**	.70**
12. Desegregation process	.11	-.06	-.14	.13	.07
13. Teaching style (1)	-.09	-.08	.12	-.09	.45**
14. Teacher training	-.10	.02	-.01	-.05	-.21
15. Achievement orientation	.18	.29**	-.36**	.39**	-.65**
16. Race-relations practices	-.20	-.08	.07	-.39**	.65**
17. Evaluation of services	.09	.09	-.29*	.10	-.12
18. Evaluation of human-relations programs	.19	.08	.00	.01	.12
19. Evaluation of instructional programs	.23*	.05	-.34**	.34**	-.37**
20. Extra time on task	-.10	.09	.11	-.11	.07
21. Teacher vs. child-centered attitudes	-.22*	-.09	.19	-.04	.21
22. Structure	.27*	-.05	-.18	.19	-.25*
23. Teaching style (2)	.06	.05	.17	.14	.01
Student Variables					
1. Racial-contact practices (Black)	-.25*	-.15	-.05	-.08	.12
2. Racial-contact practices (White)	-.17	-.10	-.31**	-.01	.11

$^{*}p < .05$ $^{*}p < .01$

[a] 1974 Data

Table 3-7 (Continued)

Fifth Grade

		Background Variables[a]				
	Principal Variables	Black SES	White SES	Percent Black	Percent Urban	North/ South
1.	Principal's racial attitude	.10	-.06	.06	.02	-.38**
2.	Support for integration	-.02	.07	-.09	-.[illegible]	.36**
3.	Absence of conflict: discipline	-.25*	.26*	.23*	-.03	.27*
4.	Absence of conflict: racial issues	-.11	.03	.20	-.01	.12
5.	Absence of conflict: ability grouping	-.06	-.02	.01	.16	.09
6.	Absence of conflict: instructional change	-.19	.13	.18	-.05	.18
7.	Absence of Principal's personal conflict	-.26*	-.08	.19	-.15	.22*
8.	School SES	-.38**	-.56**	.49**	-.31**	.39**
9.	Violent behavior	-.03	-.04	-.10	.24*	-.11
10.	Principal's interpersonal relations	-.12	.01	-.01	.13	-.08
11.	Inequality	.14	.25*	.03	.06	.11
13.	Principal's job attitude	.28*	.00	-.24*	.09	-.14
14.	Evaluation of race-relations programs	-.05	.17	.02	-.27*	.15
15.	Evaluation of instructional programs	.02	-.06	-.04	.15	-.03
16.	Evaluation of human-relations programs	-.03	-.19	-.08	-.24*	.15
17.	Evaluation of services	-.14	.01	.06	-.01	.15

*$p < .05$ **$p < .01$

[a] 1974 Data

Two issues are raised by these data. First, the pattern of differences between correlations involving the SES scores used for partialing (Tables 3-6 and 3-7) and the first principal component SES scores reported earlier (Tables 3-2 and 3-3) would seem to indicate that the SES measures based on canonicals--especially the black SES measure--lost a good deal in the translation. The question of whether enough SES background variance was removed using the canonical variates led to a supplementary analysis to achieve greater correction for student SES. That analysis appears later in this chapter.

Second, the large number of significant correlations between schools' North/South location and the school process variables appears to show the schools outside the South superior to the Southern schools. A word of caution in that interpretation is in order. The Southern sample of schools was selected differently from the Northern sample and consisted of schools which, for the most part, had been desegregated by court order a few years earlier. Most of the Northern schools, on the other hand, had a history of voluntary integration. Also, the rate of refusal to participate in the present study was very low for Southern elementary schools and quite high for Northern. The differential refusal rates cloud the pattern of correlations.

Removing variance due to background represents an attempt to determine how school characteristics are related to student outcomes independent of antecedent conditions. To answer that question and report school effects is the main goal of this chapter.

School Effects

Partial correlations between school process variables and student race-relations variables and student race-relations and achievement outcomes are presented in Table 3-8. Variance due to black SES, white SES, percent black, percent urban, and school location has been removed. The partial correlations represent school effects independent of background. If effectiveness of integrated schools is measured by student racial attitudes and achievement, effective elementary schools appear to have the following characteristics:

(1) Multi-ethnic teaching practices are reported by teachers, black students, and white students.

(2) Interpersonal relationships among teachers are described as friendly rather than warm and open.

(3) Teachers give a positive evaluation of achievement.

One set of school characteristics is notable for lack of association with student outcomes. These characteristics are evaluations of school programs--human-relations programs, race-relations programs, instructional programs and school services—as evaluated by teachers and principals.

Multi-ethnic teaching practices. Both racial contact practices as reported by black and white students (S-1 and S-2) and race-relations practices as reported by the teachers (T-16) consistently relate to good student outcomes. These variables consist of groups of items describing conditions over which the school has considerable control. The teacher variable (T-16) consists of five items including projects on intergroup problems, class discussion on race, teacher experience with students of a difference race, multi-ethnic texts, and a demand for ethnic studies. (See Table B-1 in Appendix B for a more detailed look at the loadings of the items and the correlations of items with outcomes.) The racial-contact practices reported by students include studying about black people, being

Table 3-8

Fifth Grade

Partial Correlations between School Process Variables[a] and Student Race-Relations and Achievement Outcomes

	Perceived School Racial Attitude		Students' Personal Racial Attitude		Student Achievement	
Teacher Variables	Black	White	Black	White	Black	White
1. Teachers' racial attitude	.33**	.19	.00	.21	-.04	-.05
2. Support for integration	-.32**	-.14	-.16	-.14	-.09	-.07
3. Absence of tension	.25*	.16	.01	-.03	.14	.14
4. Teachers' job attitude	.20	-.15	.25*	.04	.10	.18
5. Interpersonal relations with students	.14	.35**	.10	.22*	-.21	-.05
6. Interpersonal relations among teachers	.08	.06	-.31**	.03	-.39**	-.29**
7. Interpersonal relations of principal	-.25*	.16	-.15	-.06	-.17	-.06
8. School autonomy	-.12	.26*	.07	-.12	-.29**	-.23*
9. Teacher autonomy	-.08	.23*	.01	-.14	-.21	.17
0. Inequality	-.14	-.05	.08	-.02	-.02	.12
1. Perceived racial differences	-.19	-.04	.01	.06	-.04	.21
2. Desegregation process	-.17	-.12	.05	.03	.01	.24*
3. Teaching style (1)	-.19	-.12	-.14	-.24*	-.15	-.14
4. Teacher training	.21	.09	.04	.09	.10	.05
5. Achievement evaluation	.26*	.11	.33**	.06	.25*	.23*
6. Race-relations practices	-.18	-.21	-.43**	-.37**	-.15	.00
7. Evaluation of services	-.06	.22*	-.04	.30**	-.08	.06
8. Evaluation of human-relations programs	-.11	-.12	.00	-.03	.05	-.09
9. Evaluation of instructional programs	-.03	-.10	.17	.15	.17	.07
0. Extra time on task	.13	.05	-.11	.09	.31**	.08
1. Teacher vs. child-centered attitudes	-.14	-.22*	.04	-.21	-.08	-.23*
2. Structure	-.10	-.07	.02	.03	.10	.08
3. Teaching style (2)	-.16	.05	.02	-.08	-.13	-.07
Student Variables						
1. Racial-contact practices (Black)	-.23*	-.09	-.28*	-.28*	-.33**	-.25*
2. Racial-contact practices (White)	.03	.09	-.43**	-.34**	-.38**	-.17

*p < .05 **p < .01 [a]1974 Data N = 76 schools

Table 3-8 (continued)

Fifth Grade[a]

Principal Variables	Perceived School Racial Attitude		Students' Personal Racial Attitudes		Student Achievement	
	Black	White	Black	White	Black	White
1. Principal's racial attitude	-.03	.09	.07	.09	.02	.04
2. Support for integration	.07	.03	.01	.09	.13	.09
3. Absence of conflict: discipline	.00	.26*	-.05	-.08	-.09	.05
4. Absence of conflict: racial issues	.04	.13	.01	.12	-.05	.06
5. Absence of conflict: ability grouping	-.07	.06	-.05	-.12	-.16	-.14
6. Absence of conflict: instructional change	-.10	.03	-.03	-.04	-.04	.02
7. Absence of Principal's personal conflict	-.11	.13	-.01	-.07	-.02	.05
8. School SES	-.27*	-.15	-.18	-.28*	-.37**	-.48**
9. Violent behavior	-.07	-.20	.01	-.08	-.08	-.28*
10. Principal's interpersonal relations	-.30**	.09	-.18	-.11	-.34**	-.20
11. Inequality of parent contacts	-.16	-.19	-.26*	-.11	.05	.05
13. Principal's job attitude	.37**	.11	.02	-.10	-.12	.02
14. Evaluation of race-relations programs	.21	.01	.04	.00	.15	.01
15. Evaluation of instructional programs	-.01	-.04	.01	-.03	.03	.00
16. Evaluation of human-relations programs	.02	.00	.04	-.09	.02	-.15
17. Evaluation of services	.09	.02	.15	.02	-.07	-.10

$^{*}p < .05$ $^{**}p < .01$

[a] 1974 Data

N = 76 Schools

assigned to play on a team with students of a different race, and being assigned to work with a student of another race. Schools with good race-relations practices or racial-contact practices appear to be very open to the subject of race: to a multi-ethnic curriculum, to discussion and projects on race, and to affirmative assignments on the playground and in the classroom. The outcome from such practices appears to be good personal racial attitudes on the part of all students and better achievement for black students.

Interpersonal relations among teachers. Interpersonal relationships described as friendly rather than warm and open appear to characterize effective elementary schools. The interpersonal-relations scale has a range of 1 to 9:

(1) hostile
(3) distant, cool (seldom interact)
(5) polite
(7) friendly
(9) open, warm (often interact)

On that scale the means across schools of the three items indicating interpersonal relations among teachers, (T-6), are 7.69 (you and black teachers), 7.68 (you and white teachers) and 7.22 (black teachers and white teachers). Standard deviations are .67, .57, and .74 respectively. Negative correlations between interpersonal-relations variables and student outcomes do not mean that bad relations are associated with good outcomes. Rather, it means that more formal relationships are predictive of good student outcomes. More formal relations might characterize schools with an achievement orientation—a business-like concern with students' academic progress.

Several other relationships in Table 3-8 tend to support the concept of a more formal climate. More formal relationships between the principal and school personnel (T-7 and P-10) have significant correlations with student outcomes. Most of those are with black student outcomes although white student achievement is also related. Only with regard to teacher relationships with students and their families (T-5) does the direction of significant correlations change. Warm, open relationships are associated with white students' personal racial attitudes and perceived school racial attitudes. A look at the items which make up the variable T-5 indicates, however, that certain more formal relationships are associated with black and white student achievement. (See Table B-1 in Appendix B.) Confirmation of this relationship occurs in an analysis reported later in the chapter.

Achievement evaluation. Achievement evaluation is composed of a group of teacher items including student willingness to try to learn, the evaluation of the performance of black and white students, and the evaluation of achievement grouping practices. Elementary schools where the students try to learn, where teachers report many of their black and white students at grade level, and where teachers believe achievement grouping is not helpful to race relations appear to contain both black and white achievers and, in addition, black students whose perceived and personal racial attitudes are better.

The zero-order correlations between achievement evaluation and student outcomes are strong and consistent for black and white students. One might have expected that the relationship between achievement and its evaluation would disappear in the partialing process since the background variables which so often account for one might also account for the other. The partial correlations remain significant with black and white student achievement although the magnitude of the relationship is lessened considerably. What is interesting, however, is that the partial correlations show that achievement evaluation is related to black student race-relations outcomes. Black students' racial attitudes apparently are related to the teachers' perception of student achievement. The correlations between achievement evaluation and race-relations outcomes, together with the correlations reported in Chapter 2 between black student achievement and the personal racial attitudes of both black and white students, would seem to indicate the importance to integration of continued emphasis on student achievement. An easily implemented practice is to give slower students extra time on reading and math (T-20). The data suggest that such a practice might improve black students' achievement.

Programs. The data on program evaluation were disappointing. Of the 42 possible correlations between program variables (T-17, T-18, T-19, P-14, P-15, P-16, and P-17) and student outcomes, only two reached the .05 level of significance--a result which could have occurred by chance. Additional program results are given in Table C-1 in Appendix C.

"Program" was a difficult word to interpret for all school personnel. It was especially difficult in elementary schools where the staffs are smaller, the students younger, and the administrative organization simpler than in high schools.

It appeared from interviews with principals and teachers that such "programs" as intergroup-relations programs and parent-teacher contact programs seldom exist as formally defined activities in elementary schools. The activities are more likely to take place as part of ongoing school tasks, and therefore are not identified by staff members in a consistent way as programs. The absence of identifiable effects of these programs may reflect both inability to measure variance in such programs, and lack of association of such variance with student outcome.

Other school characteristics. School and teacher autonomy (T-8 and T-9) contain significant (or close to significant) sign reversals for black and white outcomes. School autonomy (T-8) is associated positively with white students' perception of school racial attitudes and negatively with black and white achievement. Relatively more influence in the elementary school of the school board and/or the superintendent of schools is associated with student achievement. Teacher autonomy (T-9) is associated positively with white students' perception of racial attitudes. An interesting finding among the items within the teacher autonomy variable shows the teachers' choice of textbook as positively (but not significantly) related to white achievement and significantly negatively related to black achievement. Black achievement is also negatively associated with the teachers' influence in the school and the teachers' freedom to choose the kinds of students to teach. (See Table B-1 in Appendix B.)

When the direction of a relationship changes with the race of the students, an ambiguous situation exists. School and teacher autonomy (T-8 and T-9) and teachers' warm and open relationships with students and their families (T-5) present this problem. It is interesting to note that all three variables are associated with white students' perception of school racial attitudes. Perhaps the three variables represent a "status quo" position favored by those with traditional views of schooling.

Absence of tension (T-3) as reported by the teacher is associated with black students' perception of good school racial attitude. Major components of that association are the percentages of black and white discipline problems. (See Table B-1 in Appendix B.) Absence of conflict regarding discipline (P-3) is associated with white students' perceived school racial attitude. One component of variable P-3--absence of conflict between teachers and students over discipline--is also related to black students' perception. Absence of violent behavior (P-9) is associated with white students' achievement. In general, an absence of conflict or tension over discipline problems is characteristic of elementary schools with positive race relations and good achievement.

Teacher racial attitudes (T-1) and support for integration (T-2) are associated with student race-relations outcomes when zero-order correlations are examined. After partialing out background variables the relationships hold only for black students' perceived school racial attitude. Racial attitude (P-1) and support for integration (P-2) as reported by the principal are unrelated to student outcomes. However, inequality of parent contacts (P-11)--visits to school and attendance at school events--is associated with poorer personal racial attitudes of black students.

School SES relationships are clearly disturbing. Although variance associated with measures of black student SES and white student SES was removed, there remain substantial correlations with the SES of the schools as assessed by the principal. The concern expressed earlier about the effectiveness of the SES measures is reinforced. A new analysis was made, in which the principal's estimate of the socioeconomic status of the families of students in the school was added to the group of background variables, and new partial correlations produced. The partial correlations between school process variables and student outcomes with school SES removed along with the five background variables identified earlier are given in Table 3-9. Some correlations dropped below the significance level, some gained, but most findings remained about the same. The greatest changes occurred for the school's achievement orientation (T-15) and the child-centeredness of teachers (T-21), indicating their close relationship to SES.

Summary Measures

Since many school process variables related in different ways according to the race of respondents or outcome measured, a summary measure was constructed. The ideal outcome was believed to be good race relations and good achievement for both black students and white students. Measures were constructed by summing standardized scores for black and white perceived and personal race relations as the summary race-relations measure, summing standardized black and white achievement scores as the summary achievement measure and summing all six student outcomes as the overall effectiveness measure.

With equal weight given to black student and white student responses in summary measures, partial correlations with school process variables give an indication of which school characteristics are associated with good outcomes for both black and white students. Partial correlations between school process variables and the summary measures are presented in Table 3-10.

Table 3-9

Fifth Grade

Partial Correlations between School Process Variables[a] and Student Race-Relations and Achievement Outcomes with School SES Removed

		Perceived School Racial Attitude		Students' Personal Racial Attitudes		Student Achievement	
	Teacher Variables	Black	White	Black	White	Black	White
1.	Teachers' racial attitude	.30**	.17	-.03	.17	-.12	-.17
2.	Support for integration	-.25*	-.09	-.11	-.05	.04	.11
3.	Absence of tension	.21	.14	-.02	-.08	.08	.07
4.	Teachers' job attitude	.20	-.15	.25*	.04	.10	.20
5.	Interpersonal relations with students	.12	.34**	.09	.20	-.26*	-.10
6.	Interpersonal relations among teachers	.11	.07	-.29**	.06	-.38**	-.28*
7.	Interpersonal relations of principal	-.20	.20	-.12	.00	-.11	.04
8.	School autonomy	-.06	.31**	.11	-.07	-.22*	-.14
9.	Teacher autonomy	-.06	.25*	.03	-.12	-.19	.25*
10.	Inequality	-.16	-.05	.07	-.04	-.04	.11
11.	Perceived racial differences	-.22*	-.05	-.01	.04	-.07	.20
12.	Desegregation process	-.20	-.13	.03	.01	-.02	.23*
13.	Teaching style (1)	-.13	-.09	-.11	-.19	-.07	-.04
14.	Teacher training	.19	.08	.03	.06	.07	.00
15.	Achievement evaluation	.20	.06	.29**	-.03	.16	.09
16.	Race-relations practices	-.13	-.18	-.41**	-.33**	-.08	.11
17.	Evaluation of services	-.09	.21	-.05	.29**	-.12	.02
18.	Evaluation of human-relations programs	-.11	-.12	.00	-.03	.06	-.09
19.	Evaluation of instructional programs	-.04	-.10	.17	.15	.17	.07
20.	Extra time on task	.14	.05	-.11	.10	.34**	.10
21.	Teacher vs. child-centered attitudes	-.08	-.19	.10	-.15	.02	-.12
22.	Structure	-.12	-.08	.01	.01	.08	.05
23.	Teaching style (2)	-.12	.08	.05	-.03	-.07	.02
	Student Variables						
1.	Racial-contact practices (Black)	-.19	-.07	-.26*	-.25*	-.30**	-.19
2.	Racial-contact practices (White)	.05	.11	-.42**	-.34**	-.38**	-.16

*p < .05 **p < .01

[a] 1974 Data

Table 3-9 (Continued)

Fifth Grade[a]

	Principal Variables	Perceived School Racial Attitude		Students' Personal Racial Attitudes		Student Achievement	
		Black	White	Black	White	Black	Whit
1.	Principal's racial attitude	-.07	.07	.05	.05	-.04	-.03
2.	Support for integration	.03	.01	-.02	.06	.08	.02
3.	Absence of conflict: discipline	.00	.26*	-.05	-.08	-.10	.05
4.	Absence of conflict: racial issues	.07	.15	.03	.16	-.01	.13
5.	Absence of conflict: ability grouping	-.05	.07	-.04	-.09	-.14	-.11
6.	Absence of conflict: instructional change	-.06	.06	.00	.00	.02	.11
7.	Absence of Principal's personal conflict	-.13	.12	-.03	-.09	-.05	.02
8.	School SES						
9.	Violent behavior	-.05	-.18	.03	-.05	-.04	-.26
10.	Principal's interpersonal relations	-.21	.17	-.12	.02	-.22*	.02
11.	Inequality of parent contacts	-.21	-.21	-.29**	-.16	.01	-.02
13.	Principal's job attitude	.36**	.09	.01	-.14	-.17	-.03
14.	Evaluation of race-relations programs	.22*	.02	.04	.00	.17	.02
15.	Evaluation of instructional programs	-.04	-.06	-.01	-.06	-.01	-.06
16.	Evaluation of human-relations programs	.02	.00	.05	-.09	.02	-.17
17.	Evaluation of services	.10	.02	.15	.02	-.07	-.11

[a] 1974 Data

*p < .05 **p < .01

Variance due to black SES, white SES, percent black, percent urban, South or non-South location, and the school SES has been removed. Significant relationships exist between summary measures and the following variables:

(1) Teachers' job attitude (T-4).

(2) Formal interpersonal relationships among teachers and between teachers and students or their families (T-5 and T-6).

(3) Less school autonomy (T-8).

(4) Good evaluation of achievement (T-15).

(5) Good race-relations practices (T-16).

(6) Extra time on task for slower students (T-20).

(7) Affirmative work and play assignments to promote racial contact (S-1 and S-2).

(8) An absence of violent behavior (P-9).

(9) More equality of parent contacts (P-12).

These findings reinforce those reported earlier separately by race. It is encouraging that so many variables appear which are able to be implemented fairly readily.

Practical Implications

The elementary school data indicate that the goals of good academic achievement and good race relations are compatible ones. Academic achievement of black students is correlated with favorable racial attitudes of black and white students. Teachers' evaluation of a school's achievement is correlated with good black student racial attitudes. Both of these sets of correlations are influenced, but not entirely explained, by background measures. There are school conditions that have positive effects on both achievement and race relations. There appears to be no need to sacrifice an emphasis on achievement in favor of an emphasis on race relations, or vice versa.

Table 3-10

Fifth Grade

Partial Correlations between School Process Variables and Summary Measures of Race Relations, Achievement, and Overall Effectiveness[a]

	Summary Race Relations	Summary Achievement	Summary Effectiveness
Teacher Variables			
1. Teachers' racial attitude	.19	-.18	-.15
2. Support for integration	-.19	.09	.07
3. Absence of tension	.07	.09	.15
4. Teachers' job attitude	.12	.18	.22*
5. Interpersonal relations with students	.21	-.23*	-.04
6. Interpersonal relations among teachers	-.08	-.42**	-.39**
7. Interpersonal relations of principal	-.12	-.05	-.09
8. School autonomy	.07	-.23*	-.10
9. Teacher autonomy	-.02	.03	.11
10. Inequality	-.04	.04	-.02
11. Perceived racial differences	-.10	.07	-.15
12. Desegregation process	-.08	.13	.16
13. Teaching style (1)	-.20	-.07	-.12
14. Teacher training	.14	.05	.05
15. Achievement evaluation	.22*	.16	.22*
16. Race-relations practices	-.36**	.01	-.15
17. Evaluation of services	.09	-.07	.10
18. Evaluation of human-relations programs	-.09	-.01	.07
19. Evaluation of instructional programs	.12	.16	.21
20. Extra time on task	.12	.29**	.23*
21. Teacher vs. child-centered attitudes	-.07	-.06	-.08
22. Structure	-.09	.09	.03
23. Teaching style (2)	-.05	-.04	-.10
Student Variables			
1. Racial-contact practices (Black)	-.26*	-.30**	-.34**
2. Racial-contact practices (White)	-.23*	-.35**	-.32**

*p < .05 **p < .01

[a] 1974 Data

Table 3-10 (Continued)

Fifth Grade[a]

Principal Variables	Summary Race Relations	Summary Achievement	Summary Effectivenes
1. Principal's racial attitude	.02	-.04	-.03
2. Support for integration	.03	.06	.02
3. Absence of conflict: discipline	-.02	-.04	.06
4. Absence of conflict: racial issues	.09	.07	.18
5. Absence of conflict: ability grouping	-.10	-.16	-.15
6. Absence of conflict: instructional change	-.05	.08	.14
7. Absence of Principal's personal conflict	-.11	-.02	.03
8. School SES			
9. Violent behavior	-.08	-.19	-.25*
10. Principal's interpersonal relations	-.12	-.14	-.06
11. Inequality	-.31**	.00	-.11
13. Principal's job attitude	.12	-.13	-.04
14. Evaluation of race-relations programs	.12	.12	.20
15. Evaluation of instructional programs	-.05	-.05	-.07
16. Evaluation of human-relations programs	.03	-.09	-.08
17. Evaluation of services	.16	-.12	-.13

[a] 1974 Data

*$p < .05$ **$p < .01$

The school conditions with most obvious practical implications are those that have to do with teaching practices. Teaching methods that employ interracial curriculum materials, open discussion of racial topics, and assignment of black and white students to cooperative tasks appear to have positive effects on both achievement and race relations. These are curriculum variables. They reflect how schools choose curriculum material, how teachers structure instructional activities, and how schools organize projects. They are susceptible to change in the search for ways to improve schools. The results suggest that they are profitable approaches to improvement.

The other school condition that is most strongly associated with components of effective integration is a school climate in which interpersonal relationships among teachers are friendly but formal. These and other effective school conditions can be the basis for building a program of effective integrated schooling.

A fact deserving particular emphasis is the large number of school variables that are significantly correlated with the SES of black students. Many of these correlations suggest that schools with low SES black populations are also schools in which conditions for effective integration are poor. The search for conditions and practices of effective school desegregation ought to include identification of ways in which conditions in such schools can be improved.

Chapter 4

School Conditions and Outcomes in High Schools

This chapter focuses on conditions and practices associated with race relations and student achievement in high schools. Except as otherwise noted, the analyses reported in this chapter are of the 1974 data base.

Table 4-1 presents the basic set of results relating school characteristics to student outcomes. The entries in Table 4-1 are partial correlation coefficients. The variance associated with the following background measures has been subtracted: black student SES measures, white student SES measures, racial composition of the school, percent urban, and the location of the school (South or non-South). The corresponding zero-order correlations are presented in Table 4-2. Tables 4-3 and 4-4 present further details regarding background variables. Table 4-3 describes the composites of SES variables used in this analysis. Table 4-4 shows relationships of each background variable to outcomes, and Table 4-5 shows relationships of background variables to school characteristics.

School Characteristics and Student Outcomes

The question addressed by the results in Table 4-1 is this: To what degree are school characteristics related to student outcome variables, independently of background variables? Inspection of the columns of the table shows that, in general, white student outcome measures are more highly associated with school characteristics than those of black students. A substantial number of school conditions are statistically related to white students' racial attitudes, their interracial contact, and their perceptions of predominant racial attitudes in the school. Black students' measures of these variables are less closely related to the observed school characteristics. Among the measures of outcome for black students, their perception of school fairness has the largest number of statistical relationships with school characteristics.

Achievement Scores

Table 4-1 also shows that achievement scores are not closely related to the high school characteristics observed in this study. These results contrast with those relating to elementary schools presented in Chapter 3. In the elementary school data, there are school characteristics that are systematically related to achievement scores of both black and white students, and, in general, consistent with race-relations results. This contrast between the results for elementary and high schools may to some extent reflect differences in the way the samples are constructed. The students measured in the sample of elementary schools represent most of the fifth graders in each school. The teacher samples include all fifth grade teachers and some fourth and third grade teachers.

Table 4-1

Tenth Grade

Partial Correlations between School Conditions and Student Race-Relations and Achievement Outcomes: 1974 Data[1]

Teacher Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Teachers' racial attitude	.02	.23	-.01	.47**	-.01	.55**	-.19	.01	-.11	-.02
2. Support for integration	-.11	-.36**	-.07	-.47**	-.07	-.47**	-.07	-.07	.00	.13
3. Absence of tension	.29*	.43**	.00	.39**	-.01	.36**	.15	.16	-.11	.06
4. Teachers' job attitude	-.09	.05	-.23	-.18	-.24	-.07	-.06	-.20	-.04	-.37**
5. Interpersonal relations with students	.14	.31*	-.08	.20	-.03	.24	.41**	-.09	.03	-.30*
6. Interpersonal relations among teachers	-.09	.12	-.26*	.21	-.06	.17	.14	-.01	.00	-.21
7. Interpersonal relations of principal	.00	.09	-.22	.03	-.24	-.14	.14	.05	-.07	-.16
8. School autonomy	-.02	.02	-.13	.14	-.30*	-.07	.07	.04	-.06	.13
9. Teacher autonomy	.16	.08	-.10	.33**	-.05	.24	.19	.08	-.07	-.01
10. Inequality	-.14	-.11	-.04	-.18	-.11	-.21	-.35**	.02	.01	.08
11. Perceived racial differences	.03	-.14	-.02	-.24	-.04	-.29*	.00	-.05	-.02	.09
12. Desegregation process	-.11	-.43**	.09	-.41**	.14	-.36**	-.16	-.30*	.08	-.12
13. Teaching style (1)	-.32*	-.42**	.05	-.35**	.02	-.29*	-.18	-.16	.15	-.03
14. Teacher training	.10	.11	-.18	.19	-.27*	-.07	.27*	.05	-.13	.03
15. Evaluation of principal	-.07	-.27*	.02	-.36**	-.02	-.29*	-.31*	-.29*	.10	-.06
16. Multi-racial teaching	-.18	-.23	.10	-.43**	.03	-.22	-.36**	-.18	.02	-.12
17. Evaluation of school services	-.05	-.31*	.02	-.48**	-.06	-.29*	-.37**	-.31*	-.08	-.16
18. Evaluation of human relations prog.	.06	-.22	-.10	-.34**	.04	-.27*	-.06	-.12	.04	.05
19. Evaluation of instructional prog.	.08	-.18	.29*	-.11	.23	-.09	-.18	-.04	-.03	.00
20. Teaching style (2)	-.11	-.31*	.02	-.22	-.11	-.27*	-.16	-.23	.15	-.05

* Significant at .05 level
** Significant at .01 level

[1] N=60 schools

Table 4-1 (Continued)

Tenth Grade

Partial Correlations between School Conditions and
Student Race Relations and Achievement Outcomes: 1974 Data[1]

	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
Principal Variables	Black	White	Black	White	Black	White	Black	White	Black	White
1. Principal's racial attitude	.18	.33**	-.11	.38**	.03	.24	-.04	-.02	-.33**	-.03
2. Support for integration	-.16	-.11	-.07	-.20	-.12	-.27*	.12	.20	-.04	.16
3. Absence of conflict: discipline	.20	.23	.01	.34**	.01	.25*	.40**	.50**	.07	.28*
4. Absence of conflict: racial issues	.48**	.36**	.17	.39**	.05	.28*	.36**	.38**	-.04	.16
5. Absence of conflict: ability grouping	-.17	.09	-.02	.25*	.19	.15	.23	.55**	.16	.44**
6. Absence of conflict: instr. change	.30*	.00	.18	.22	.11	.29*	.36**	.38**	.16	.33**
7. Absence of principal's personal conflict	.06	.01	.30*	.00	.24	.19	.39**	.38**	.14	.07
8. School SES	.14	.27*	.21	.03	.21	-.03	.04	-.02	-.05	-.32*
9. Violent behavior	-.06	-.22	.04	-.18	-.13	-.17	-.13	.07	-.01	.03
10. Principal's interpersonal relations	.07	.07	.09	.29*	.06	.05	-.08	-.15	-.07	.03
11. Inequality	.03	-.10	-.07	.03	.15	.23	.19	.17	.05	.09
13. Principal's job attitude	-.02	-.01	-.21	-.12	-.15	-.10	-.03	-.17	.17	-.08
14. Evaluation of race relations prog.	.12	.02	.14	-.08	.24	-.09	-.01	.01	-.07	-.07
15. Evaluation of instructional prog.	.09	-.15	.12	.05	.16	.29*	-.04	.00	-.04	.06
15. Evaluation of human relations prog.	.11	.01	.09	-.07	-.08	-.05	-.08	-.08	-.23	-.16
17. Evaluation of services	.37**	.28*	.29*	.34**	.22	.30*	.27*	.06	-.18	.08

* Significant at .05 level
** Significant at .01 level

[1] N=60 schools

Table 4-1 (Continued)

Tenth Grade

Partial Correlations between School Conditions and Student Race Relations and Achievement Outcomes: 1974 Data[1]

Guidance Counselor Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Counselors' racial attitude	.10	.18	-.06	.25	.07	.19	-.04	-.04	-.06	.14
2. Rules and discipline	.00	-.04	-.01	.23	.04	.22	.12	.29*	.11	-.01
3. Counselor duties	.07	-.04	-.02	.05	-.13	-.17	-.04	-.25	-.11	-.16
4. Perceived racial differences	-.03	-.17	.09	-.31*	-.02	-.15	.09	.00	-.11	-.09
5. Evaluation of facilities	-.03	.17	-.01	.14	.06	.09	.21	.26	.24	.08
6. Counseling practices	.07	.04	.00	.20	-.06	.02	-.05	-.08	-.06	-.04
7. Interpersonal relations of principal	-.03	-.14	.14	-.19	.06	-.06	.04	-.02	.02	-.22
8. Interpersonal relations with teachers	-.07	.03	.20	-.05	.19	-.11	.12	.18	.02	-.18
9. Interpersonal relations: parents, stud.	-.16	.04	.08	-.02	-.01	.02	.00	.08	.01	-.09
10. Evaluation of race relations prog.	-.19	-.24	-.27	-.31*	-.07	-.33*	-.25	-.26	-.05	-.29*
11. Evaluation of instructional prog.	-.17	-.05	.00	.00	.07	.01	-.22	-.04	.11	.11
12. Evaluation of human relations prog.	-.16	-.35*	-.01	-.39**	-.15	-.42**	-.15	-.24	-.11	-.13
13. Evaluation of services	-.01	.14	.19	.18	.18	.22	.17	-.02	.23	.14

* Significant at .05 level

** Significant at .01 level

1 N=48 schools

Table 4-2

Tenth Grade

Zero-Order Correlations between School Process Conditions and Student Race-Relations and Achievement Outcomes: 1974 Data[1]

Teacher Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Teachers' racial attitude	.05	-.09	.00	.53**	-.06	.73**	-.06	.03	.02	-.02
2. Support for integration	-.13	-.10	-.06	-.53**	-.02	-.62**	-.10	-.05	-.04	.15
3. Absence of tension	.23	.48 **	.01	.14	.03	-.04	.07	.08	-.19	.01
4. Teachers' job attitude	-.17	.03	-.19	-.27*	-.15	-.24	-.12	-.20	-.04	-.28*
5. Interpersonal relations with students	.20	.25 *	-.02	.15	-.08	.23	.42**	-.14	.00	-.33**
6. Interpersonal relations among teach.	-.03	.10	-.26*	.27*	-.07	.21	.16	.04	-.02	-.20
7. Interpersonal relations of principal	-.02	.13	-.25*	.09	-.21	-.10	.14	.12	-.05	-.09
8. School autonomy	.01	-.04	-.13	.25*	-.31*	.12	.14	.11	-.01	.13
9. Teacher autonomy	.11	.12	-.15	.38**	-.04	.21	.19	.17	-.04	.03
10. Inequality	-.08	-.04	.03	-.20	-.16	-.17	-.29*	.00	.03	.09
11. Perceived racial differences	.04	.03	-.03	-.28*	-.05	-.39**	.02	.01	-.07	.10
12. Desegregation process	-.06	-.29*	.08	-.35**	.11	-.29*	-.12	-.23	.07	-.08
13. Teaching style (1)	-.20	-.29*	.06	-.36**	.03	-.26*	-.19	-.20	.08	-.08
14. Teacher training	.10	-.03	-.14	.16	-.24	.01	.24	.00	-.14	-.03
15. Evaluation of principal	.02	-.27*	.05	-.26*	-.07	-.06	-.23	-.28*	.10	-.09
16. Multi-racial teaching	-.06	.10	.10	-.53**	.06	-.49**	-.33**	-.22	-.12	-.14
17. Evaluation of school services	-.12	-.26*	-.04	-.35**	-.03	-.20	-.35**	-.21	-.02	-.07
18. Evaluation of human-relations prog.	.00	-.08	-.16	-.28*	.08	-.31*	-.08	-.03	.02	.08
19. Evaluation of instructional prog.	.05	-.15	.22	.00	.19	-.01	-.12	.05	-.01	.03
20. Teaching style (2)	.02	-.30*	.08	-.20	-.13	-.10	-.13	-.29*	.08	-.14

* Significant at .05 level
** Significant at .01 level
1 N=60 schools

Table 4-2 (Continued)

Tenth Grade

Zero Order Correlations between School Process Conditions and Student Race Relations and Achievement Outcomes: 1974 Data[1]

Principal Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Principal's racial attitude	.26*	.23	-.06	.42**	-.09	.38**	.11	.04	-.25*	-.06
2. Support for integration	-.17	-.03	-.03	-.33**	-.07	-.41**	.05	.11	-.06	.13
3. Absence of conflict: discipline	.18	.29*	.04	.19	.00	.04	.37**	.43**	.03	.24
4. Absence of conflict: racial issues	.44**	.41**	.17	.26*	.04	.07	.33**	.33**	-.11	.10
5. Absence of conflict: ability grouping	-.09	.07	.04	.19	.10	.12	.28	.51**	.16	.40**
6. Absence of conflict: instruct. change	.24	-.01	.22	.15	.08	.21	.34**	.32*	.17	.31*
7. Absence of principal's pers. conflict	.08	-.05	.29*	.02	.22	.22	.38**	.32*	.11	.03
8. School SES	.50**	.35**	.26*	-.11	-.01	-.03	.13	-.18	-.30*	-.45**
9. Violent behavior	-.10	-.41**	-.01	.10	-.11	.26*	-.05	.11	.12	.06
10. Principal's interpersonal relations	-.04	-.01	.05	.36**	.06	.16	-.07	-.06	.06	.12
11. Inequality	-.07	-.05	-.19	.09	.21	.07	.10	.23	.00	.10
13. Principal's job attitude	-.03	-.04	-.19	-.07	-.12	.03	-.07	-.19	.20	-.07
14. Evaluation of race-relations prog.	.08	.21	.10	-.23	.23	-.40**	-.05	.00	-.16	-.07
15. Evaluation of instructional prog.	.17	.05	.10	-.01	.12	.08	-.04	.01	-.13	.01
16. Evaluation of human-relations prog.	.10	.15	.04	-.09	-.04	-.19	-.10	-.04	-.26*	-.15
17. Evaluation of services	.32*	.34**	.23	.25*	.25*	.12	.18	.02	-.22	.03

* Significant at .05 level
** Significant at .01 level
1 N= 60 schools

Table 4-2 (Continued)

Tenth Grade

Zero Order Correlations between School Process Conditions and Student Race Relations and Achievement Outcomes: 1974 Data[1]

Guidance Counselor Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Counselors' racial attitude	.11	-.04	-.05	.33*	.05	.40**	-.02	-.07	-.02	.07
2. Rules and discipline	-.03	.04	-.04	.11	.10	.01	.04	.22	.04	-.03
3. Counselor duties	.16	-.10	-.02	.17	-.17	.10	.05	-.19	-.10	-.18
4. Perceived racial differences	-.11	-.14	.03	-.29*	.05	-.21	.03	.01	-.10	-.06
5. Evaluation of facilities	-.23	.04	-.13	.27	.12	.15	.13	.36**	.35*	.24
6. Counseling practices	.14	-.03	.00	.25	-.12	.14	.05	-.02	-.09	-.08
7. Interpersonal relations of principal	.01	-.06	.15	-.22	.03	-.13	.07	-.01	-.02	-.20
8. Interpersonal relations with teachers	-.05	.11	.17	-.08	.18	-.18	.11	.18	-.02	-.16
9. Interpersonal relations: parents, stud.	-.07	.14	.11	-.06	-.04	-.04	.02	.06	-.01	-.08
10. Evaluation of race-relations prog.	.05	-.18	-.11	-.22	-.21	-.10	-.04	-.20	-.07	-.28*
11. Evaluation of instructional prog.	-.12	-.12	.06	.05	-.01	.17	-.13	-.02	.18	.13
12. Evaluation of human-relations program	-.02	-.36**	.06	-.34*	-.21	-.20	-.07	-.27	-.13	-.19
13. Evaluation of services	-.10	.01	.12	.23	.20	.22	.14	.03	.25	.16

* Significant at .05 level
** Significant at .01 level
1 N=48 schools

Therefore, the teachers measured are those with the greatest opportunity to influence the specific students in the sample. In the high school sample, students were drawn from English classes. These students share classrooms and teachers to a lesser extent than do the elementary students. There is also less likelihood that a given student's own teachers are included.

There may be substantive as well as methodological reasons for the relative lack of relationship between high school achievement and school characteristics. High school student bodies are more heterogeneous than are those of elementary schools. Student achievement is a function of a longer learning history and probably of more extra-school factors. Whatever the reasons, the data give us little opportunity to explain high school student achievement as a function of school characteristics.

Race Relations

Table 4-1 can be described in several different ways. A study of the columns will show what school descriptors are related to each student-measured outcome. The rows will indicate the relative effect of each school variable. This section will attempt a general description of variables associated with good race relations. Since there are multiple measures of race relations, the focus in this description is on school variables associated with more than one outcome measure. There are no school process variables that predict all outcome measures. There are some variables, however, that have consistent relationships with several facets of good race relations.

The results in Table 4-1 lead to a description of schools with good race relations. The description below is based on variables that appear to have positive effects on more than one outcome variable, and negative effects on none. If race relations is judged by student outcomes, schools with good race relations have the following characteristics:

1. A principal who is evaluated highly by the faculty.

2. Teaching and school activities designed to promote biracial association and respect.

3. Support for integration, which is shared and perceived by teachers, administrators, and students.

4. Positive racial attitudes of teachers, which are reported by the teachers themselves and perceived by students.

5. Absence of tension and conflict concerning racial issues and other social and educational concerns.

6. Warm and friendly interpersonal relationships among teachers, students, and parents.

Evaluation of the principal. This composite (T-15) is primarily determined by an overall evaluative rating of the principal, the description of the principal as supportive of both black and white teachers and as a person of major influence in the school and district. Schools whose principals are given high ratings on this composite by teachers tend to be described by both black and white students as high in fairness to students. White students in such schools also tend to be characterized by positive personal racial attitudes, by perception of positive racial attitudes on the part of others in the school, and by relatively extensive interracial contact.

Multiracial teaching. The teacher composite labeled multi-ethnic teaching (T-16) describes variations in the use of multi-ethnic texts, class discussions on race, intergroup projects, biracial projects, and positively evaluated minority history courses. This measure is associated with black students' perception of school fairness and with white students' racial attitudes. This finding is consistent with results in elementary schools, and strengthens the conclusion that integrated schooling is improved by a positive approach to multiracial teaching.

Of the school characteristics associated with race relations, instructional practices are perhaps the most susceptible to control and planning. The results for both elementary and high schools indicate that it is possible to design instructional practices to promote good race relations. These practices include the choice of instructional material: text material with multi-ethnic content is consistently related to positive outcomes. The practices also include deliberate efforts to involve black and white students interactively, and to incorporate racial topics and racial issues into instructional activities.

In several instances, teachers' evaluations of ongoing school programs as helpful to race relations are related to positive outcomes. The school services composite (T-17) includes guidance counselors, social workers, and teacher aides. Evaluations of these programs by teachers as helpful to race relations is associated with school fairness as reported by both black and white students and with racial attitude, racial contact, and perceived school racial attitudes as reported by white students. Note that the principals' evaluation of the adequacy of these services is related to several outcomes in the opposite direction. The principals evaluated these programs with regard to overall adequacy, rather than with specific regard to helpfulness for race relations. Human-relations programs include programs for parent-student contact, intergroup-relations programs for teachers, and intergroup-relations programs for students. The helpfulness of these programs for race relations as evaluated by teachers (T-18) and guidance counselors (C-12) is associated with positive attitudinal outcomes for white students.

Support for integration. When teachers report support for integration (T-2), white students express positive racial attitudes, report a relatively high level of voluntary racial contact, and perceive the school to be characterized by positive racial attitudes. Two kinds of relationship are reflected in these results. In some instances, teacher and student measures may be considered to be separate measures of the same variable. Specifically, teacher-reported support for integration and student-reported school racial attitude measure the degree to which people in the school like racial integration. Similarly, teacher-reported support for integration includes as a component the degree to which students like integration; student racial attitude and racial contact describe the same variable in different words and from a different perspective. These results give credence to two propositions: that the measuring instruments are valid and that there exist variations in teacher and student attitudes that are perceptible in shared ways.

There are other results that suggest independent relationships between support for integration on the part of staff members and racial attitudes of white students. The support for integration composite has components descriptive of support by black and white teachers and by the principals. These components are also related to the racial attitudes and interracial contact of white students.

As a composite, the principals' report of support for integration (P-2) is significantly related only to racial contact. However, when one examines the items making up the composite, it will be noted that principals' description of white teachers' and black teachers' support is significantly related to student racial attitude; white teachers' support is related also to perceived school racial attitude. The composite, however, has three additional components--support by the principal, the principal's superior, and the school superintendent. The latter three components all correlate (nonsignificantly) in a negative direction with student racial attitude and perceived school social attitude. This presence in the composite camouflages positive associations for teacher variables.

The support for integration composites are not significantly related to black student outcome measures. At the item level, teacher-reported support by students is related to school fairness as reported by black students.

The Southern Schools study (NORC, 1973) found that teachers and principals who express positive racial attitudes have less prejudiced students. The present study affirms that finding, in a sample that includes non-Southern as well as Southern schools. Since a rather wide range of background variables were controlled, it seems tenable to conclude that the relationship between staff attitudes is not accounted for by the backgrounds of the schools and students. A reasonable working hypothesis is that:

(a) the support for integration provided by staff members is an influential variable, if not the sole one, in determining the attitudes of students, and

(b) the school itself--through its instruction, social climate, and extracurricular activities--is a medium for the transmission of that influence.

Racial attitudes of teachers. Teachers' racial attitudes (T-1) have a strong relationship with the racial attitudes and the racial contact of white students. The racial attitudes of principals are also related positively to those of white students. The relationships between racial attitudes of teachers and principals to white students' perceptions of school racial attitude suggest that the racial attitudes of school professionals are perceived and reported with substantial accuracy by white students. Moreover, the statements made by teachers and principals are personal statements of attitudes, while the perceptions reported by students include tension, unfairness, and complaints of favoritism, as well as the degree to which teachers appear to like integration. Thus, the attitudes of teachers and principals are associated with students' perception of actions and atmosphere in the school.

Teachers' (T-1) and counselors' (C-1) racial attitudes are not significantly related to black student outcome measures. Apparently, variations in these attitudes do not influence the racial attitudes of black students, nor their perceptions of racial attitudes of others.

The principals' racial attitude composite (P-1) is unrelated to black students' race-relations outcomes. However, examination of the items that make up the composite (Appendix B, Table 2) reveals that there some of the component items have negative relationships with black student racial attitude. Specifically, black student racial attitude is negatively related to the principals' statements that black students and white students are better off in mixed schools (partial correlations are -.43 and -.25 for statements about black and white students respectively). Moreover, principals' racial attitude is negatively related to black students' achievement scores. A check was made to see if these relationships were mediated by a relationship between principals' racial attitudes and the distribution of students in academic and nonacademic programs. Principals' racial attitude is not related to the percent of black students in academic programs, vocational programs, or general programs. The findings regarding principals' racial attitude and race relations may be summarized as follows: there is evidence that principals' racial attitude is positively associated with white students' racial attitudes, white students' interracial contact, and white students' perception of racial attitudes characteristic of the school. There is no evidence of such a positive association with black students' outcomes; indeed there is some indication of a negative association for the principals' opinion that integrated education is best for students.

Absence of tension and conflict. When teachers describe a school atmosphere free of tension (T-3), both black and white students perceive racial attitudes in the school to be positive. White students also report a more positive personal racial attitude and a greater incidence of voluntary interracial contact.

Student-measured race relations variables are systematically related to the kinds and degrees of conflict reported by principals. Schools characterized by black students as having positive racial attitudes are marked by lack of conflict over racial issues (P-4) and instructional change (P-6). Schools that black students describe as fair are marked by lack of conflict over discipline (P-3), racial issues (P-4), and instructional change (P-6). For black students, positive racial attitudes, racial contact, and description of school fairness are related to the principal's lack of personal conflict between family and work (P-7). White students' racial attitudes are related to absence of conflict over discipline (P-3), racial issues (P-4), and ability grouping (P-5). Their perceptions of school racial attitude are related to absence of conflict over discipline and racial issues.

Race-relations outcomes based on white student responses are related to teachers' description of a desegregation process with positive effects--lessening prejudice, increasing learning, and improving schools (T-12).

It is always difficult to discern causal patterns in correlational data. Results regarding absence of tension and conflict are particularly troublesome in this regard because many different causal hypotheses are plausible. Positive racial attitudes on the part of students may produce conflict-free schools—and vice versa. Schools with little conflict may be perceived by black students as fair and racially positive because lack of conflict is the stimulus for such perceptions, or because fairness and racial equity minimize conflict. The results show that absence of conflict, positive racial attitudes, and positive student response to the school constitute a complex of systematically interrelated variables. It is a plausible--but not demonstrated--hypothesis that interventions that improve one will also improve others.

Interpersonal relations. The more often relationships involving teachers, students, and parents are described as warm and open (T-5), the more white students perceive school racial attitudes to be positive and report greater interracial contact. Black students describe such schools as fair to them. Note, however, that more formal relationships are associated with white student achievement. A similar finding was noted in the elementary schools. It appears that warm and open interpersonal relations are descriptive of high schools with good race relations. However, more formal interpersonal relations are associated with better achievement. (This negative relationship with achievement was not found in the 1975 data reported later in this chapter.) To try to translate these findings into actions poses an obvious dilemma. Warm and open interpersonal relationships between students and teachers have positive effects on students' perceptions of the school environment. They are not an unequivocal good, however. It is necessary to develop relationships that are conducive to effective learning, and these relationships are not necessarily marked by closeness. Warm and open interpersonal relationships suggest that both students and teachers give emphasis to social values in the school setting. These values may compete with academic values. They may lead, for example, to lower expectations for achievement. The implication is that positive interpersonal relations may have value in a school, but that care must be taken to assure that they do not supplant academic values.

A set of analyses was conducted to examine whether the presence or absence of particular school programs is related to student outcomes. The results are tabulated in Appendix C. The major conclusions may be summarized as follows. The existence of minority history and culture courses is associated with several indicators of good race relations for both black and white students. There are also positive race-relations outcomes associated with extracurricular programs geared toward minority group participation. Several achievement-related programs are associated with positive race-relations outcomes: achievement grouping of classrooms, special classes for underachievers, and ungraded classes. On the other hand, there are several variables whose absence is associated with positive outcomes: home visitors, teacher aides, remedial reading, teacher workshops, and biracial advisory committees.

Background Measures

Data regarding background variables are presented in Tables 4-3, 4-4, and 4-5. Table 4-3 shows the composition of the SES measures. Tables 4-4 and 4-5 show the correlations of each background measure with student outcomes and school characteristics respectively.

The SES of black students bears some relation to student-measured race-relations outcomes (Table 4-4). It also has a bearing on school characteristics. The discussion in Chapter 3 suggests that low SES black elementary school students are likely to be in schools where racial attitudes are poorer and where practices that might improve racial attitudes are lacking. This pattern is true in high schools as well. Lower black student SES is significantly associated with: poorer teachers' racial attitude, lack of support for integration, perception by teachers of differences between black and white students, and absence of multi-racial teaching practices. Principals are less likely to evaluate race-relations, instructional, and human-relations programs as adequate when black student SES is low. These findings have an important bearing on the often-debated subject of school effects. There are arguments about whether school factors or background factors are more important determinants of educational outcome. The findings in Table 4-5 suggest that the quality of schooling offered black students is related to their socioeconomic background.

The school's racial composition, the degree to which its community is urban, and its location in a Southern or non-Southern state also have relationships with school characteristics, as well as with student outcomes. These relationships call for a careful comparison of partial correlations with zero-order correlations (Table 4-2), to make sure that practical correlates of student outcomes are not obscured. In the present case, the comparison does not lead to a significant change in the description of schools characterized by good race relations. While a number of relevant correlations become smaller with correction for background measures, the pattern of significant relationships is similar.

Table 4-3

Tenth Grade

Composition of the Socioeconomic Status Scales[a] for Black and White Students

	Weights	
	Black	White
Mother a high school graduate?	.02	.04
Live with both parents?	.23	-.15
Family newspaper regularly?	-.07	-.25
Family own their homes?	-.09	-.16
Number of siblings	-.06	-.03
Family income	.00	.00
Father's income	.00	.00

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[a] 1974 Data

Table 4-4

Tenth Grade

Zero-Order Correlations between Background Variables and Student Race-Relations and Achievement Outcomes: 1974 Data[1]

		Background Variables				
		Black SES	White SES	% Black	% Urban	North/ South
Perceived school racial attitude	Black	-.19	-.36**	.42**	-.21	-.01
	White	-.48**	-.03	-.06	-.38**	.15
Personal racial attitude	Black	-.01	-.09	.27*	-.03	.16
	White	.21	.18	-.02	.26*	-.38**
Racial contact	Black	.06	.06	-.25*	-.06	-.03
	White	.48**	.12	.37**	.36**	-.43**
School fairness	Black	-.07	-.07	.21	.11	-.03
	White	-.07	.19	-.19	.19	-.13
Achievement	Black	.23	.38**	-.08	.25*	-.04
	White	.05	.35**	-.22	.20	.01

* Significant at .05 level
** Significant at .01 level

[1] N = 60 schools

Table 4-5

Tenth Grade

Zero-Order Correlations between Background Variables and School Conditions: 1974 Data[1]

		Background Variables				
	Teacher Variables	Black SES	White SES	% Black	% Urban	North/ South
1.	Teachers' racial attitude	.44**	.03	.34**	.43**	-.50**
2.	Support for integration	-.34**	.05	-.28*	-.24	.41**
3.	Absence of tension	-.28*	-.12	-.17	-.37**	.37**
4.	Teachers' job attitude	-.02	-.02	-.22	-.10	.36**
5.	Interpersonal relations with students	.03	-.08	.19	-.02	.02
6.	Interpersonal relations among teachers	-.02	-.04	.04	.09	-.27
7.	Interpersonal relations of principal	-.12	.10	-.10	.05	-.16
8.	School autonomy	.04	.04	.11	.30*	-.33**
9.	Teacher autonomy	-.12	.10	-.07	.09	-.25*
10.	Inequality	-.07	.12	.13	-.04	.17
11.	Perceived racial differences	-.34**	-.02	-.15	-.07	.14
12.	Desegregation process	-.14	.04	-.01	.02	-.06
13.	Teaching style (1)	-.04	-.08	.03	-.20	.06
14.	Teacher training	.18	-.18	.07	.07	-.04
15.	Evaluation of principal	.13	-.02	.23	.09	-.15
16.	Multi-racial teaching	-.38**	-.14	-.17	-.58**	.53**
17.	Evaluation of school services	-.01	.14	-.13	.10	-.13
18.	Evaluation of human-relations program	-.20	.04	-.24	-.06	-.06
19.	Evaluation of instructional program	-.06	.02	-.05	.19	-.25*
20.	Teaching style (2)	.12	-.16	.26*	-.07	.01

* Significant at .05 level
** Significant at .01 level

[1] N = 60 schools

Table 4-5 (Continued)

Tenth Grade

Zero-Order Correlations between Background Variables and School Conditions: 1974 Data[1]

				Background Variables		
	Principal Variables	Black SES	White SES	% Black	% Urban	North/ South
1.	Principal's racial attitude	-.04	-.03	.32*	.23	-.43**
2.	Support for integration	-.11	-.06	-.17	-.19	.43**
3.	Absence of conflict: discipline	-.18	.00	-.03	-.17	.25*
4.	Absence of conflict: racial issues	-.21	-.09	-.04	-.19	.14
5.	Absence of conflict: ability grouping	-.07	.01	.12	.13	.09
6.	Absence of conflict: instructional change	.04	.06	.07	.00	.17
7.	Absence of principal's personal conflict	.11	-.10	.10	.04	-.09
8.	School SES	-.31	-.51**	.53**	-.47**	.00
9.	Violent behavior	.46**	.08	.15	.50**	-.47**
10.	Principal's interpersonal relations	.13	.26*	-.03	.21	-.16
11.	Inequality	-.13	-.08	-.36**	.03	-.21
13.	Principal's job attitude	.19	.12	.09	-.06	-.05
14.	Evaluation of race-relations program	-.41**	-.13	-.29*	-.32*	.35**
15.	Evaluation of instructional program	-.33**	-.10	-.02	-.20	.02
16.	Evaluation of human-relations program	-.26*	-.03	-.17	-.20	.02
17.	Evaluation of services	-.12	-.05	-.08	-.29*	.03

* Significant at .05 level
** Significant at .01 level

[1] N = 60 schools

Table 4-5 (Continued)

Tenth Grade

Zero-Order Correlations between Background[1] Variables and School Conditions: 1974 Data

				Background Variables		
	Guidance Counselor Variables	Black SES	White SES	% Black	% Urban	North/ South
1.	Counselors' racial attitude	.35*	-.03	.21	.20	-.25
2.	Rules and discipline	-.11	-.14	-.14	-.30*	.25
3.	Counselor duties	.15	-.02	.20	.31*	-.47**
4.	Perceived racial differences	.01	-.04	-.13	.01	.00
5.	Evaluation of facilities	.18	.33*	-.23	.36*	-.34*
6.	Counseling practices	.00	-.16	.11	.27	-.30*
7.	Interpersonal relations of principal	-.15	-.03	-.03	-.02	.05
8.	Interpersonal relations with teachers	-.17	.00	-.07	-.10	.03
9.	Interpersonal relations: parents, students	-.13	.05	.08	-.07	.05
10.	Evaluation of race-relations program	-.07	-.10	.25	.28	-.14
11.	Evaluation of instructional program	.18	.19	.20	.28	-.10
12.	Evaluation of human-relations program	.16	-.07	.23	.13	-.14
13.	Evaluation of services	.12	.07	-.08	.21	-.15

* Significant at .05 level
** Significant at .01 level

[1] N = 48 schools

An Analysis of 1975 Data

The analysis of relationships between school conditions and student outcomes was repeated using the 1975 data base. There are 21 schools with 1975 data. They were selected from the 1974 sample on the basis of composite student race-relations measures. Eleven schools were strong in race relations in 1974, and ten were weak. Eleven schools were Southern and ten were non-Southern. A description of how the 1975 sample was selected is presented in Chapter 6. A reduced amount of staff data was collected in the 1975 survey. In particular, the principal's interview form was omitted.

Tables 4-6 and 4-7 present the partial correlations and zero-order correlations, respectively, between measures of school conditions and measures of outcomes. This discussion focuses on the light that the 1975 data shed on interpretation of the 1974 data. Since the data base contained only 21 schools, there are a few degrees of freedom for establishing new relationships. We say that a 1975 result "confirms" a 1974 result if the coefficient is significantly different from zero in the predicted direction using a one-tailed significance test.

Inspection of Table 4-6 leads to several conclusions. In 1975, as in 1974, black student outcomes are much less closely associated with measured school conditions than are white student outcomes. Unfortunately, the conditions most closely related to black student measures in 1974 were not retested; these were measures from the principal's interview describing seriousness and sources of conflict within the school. The 1975 results offer little guidance to school conditions associated with the attitudes and perceptions of black high school students.

Achievement measures of both black and white students were poorly predicted in 1975 as they were in 1974. No relationship involving achievement

Table 4-6

Tenth Grade

Partial Correlations between School Conditions and Student Race-Relations and Achievement Outcomes: 1975 Data[1]

Teacher Variables	Perceived School Racial Attitudes Black	Perceived School Racial Attitudes White	Students' Personal Racial Attitudes Black	Students' Personal Racial Attitudes White	Racial Contact Black	Racial Contact White	School Fairness Black	School Fairness White	Achievement Black	Achievement White
1. Teachers' racial attitude	.12	.36	-.40	.46^a	-.09	.39^a	.19	.04	-.36	.05
2. Support for integration	-.34	-.39^a	-.02	-.59^a	-.20	-.46^a	-.08	-.12	.01	-.42
3. Absence of tension	.35^b	.56^a	.25	.53^a	.47	.52^a	.18	.39	.10	.55
4. Teachers' job attitude	.10	.25	.00	.26	.16	-.36	.12	-.06	-.28	-.03^b
5. Interpersonal relations with students	.17	.38^a	.11	.21	-.14	.11	.43^a	.44	.28	.72^c
6. Interpersonal relations among teachers	.12	.42	.10^b	.53	-.05	.27	.03	.35	.12	.49
7. Interpersonal relations of principal	.19	.43	.11	.51	.15	.56	.30	.33	-.09	.24
8. School autonomy	.10	-.09	.26	.18	.22^b	.32	.33	-.01	.02	.26
9. Teacher autonomy	-.12	-.29	.17	.14^b	.07	.39	.38	.10	.09	.27
10. Inequality	-.28	-.59	-.48	-.64	-.57	-.47	-.38^a	-.56	.08	-.15
11. Perceived racial differences					NOT AVAILABLE					
12. Desegregation process	-.47	-.57^a	.00	-.76^a	-.37	-.71^a	-.21	-.33^b	.09	-.42
13. Teaching style (1)	-.22^b	-.06^b	.04	-.12^b	-.02	-.31^b	-.58	-.16	-.25	-.48
14. Teacher training					NOT AVAILABLE					
15. Evaluation of principal	-.44	-.38^a	-.23	-.65^a	-.53	-.77^a	-.31^b	-.33^b	-.13	-.39
16. Multi-racial teaching					NOT AVAILABLE					
17. Evaluation of school services					NOT AVAILABLE					
18. Evaluation of human-relations program					NOT AVAILABLE					
19. Evaluation of instructional program					NOT AVAILABLE					
20. Teaching style (2)	-.06	-.06^b	.11	-.04	.09	-.13^b	-.53	-.30	-.40	-.47

NOTES: [a] Significant in 1974 and 1975 (.05 level, one-tailed test)

[b] Significant in 1974 but not in 1975

[c] Note difference in sign for 1974 and 1975 results

[1] N=21 schools

Table 4-6 (Continued)

Tenth Grade

Partial Correlations between School Conditions and Student Race Relations and Achievement Outcomes: 1975 Data[1]

Principal Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Principal's racial attitude	-.30	-.36^c	.06	.07^b	-.24	.06	.03	-.32	-.15^b	-.46
2. Support for integration	.00	-.13	-.41	-.26	-.22	-.23^b	.05	-.24	.08	.33
3. Absence of conflict: discipline	NOT AVAILABLE									
4. Absence of conflict: racial issues	NOT AVAILABLE									
5. Absence of conflict: ability grouping	NOT AVAILABLE									
6. Absence of conflict: instructional change	NOT AVAILABLE									
7. Absence of principal's personal conflict	NOT AVAILABLE									
8. School SES	.37	.37^a	.33	-.32	.23	-.28	.36	-.17	-.19	-.21^b
9. Violent behavior	-.34	-.22	.00	.55	-.23	.45	.03	.42	.34	.07
10. Principal's interpersonal relations	NOT AVAILABLE									
11. Inequality	NOT AVAILABLE									
13. Principal's job attitude	-.37	-.26	-.37	-.51	-.10	-.45	-.62	-.41	-.21	-.36
14. Evaluation of race relations program	NOT AVAILABLE									
15. Evaluation of instructional program	NOT AVAILABLE									
16. Evaluation of human relations program	NOT AVAILABLE									
17. Evaluation of services	NOT AVAILABLE									

a. b. c. (See page 130)

[1] N=21 Schools

Table 4-6 (Continued)

Tenth Grade

Partial Correlations between School Conditions and Student Race Relations and Achievement Outcomes: 1975 Data[1]

Guidance Counselor Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Counselor's racial attitude	-.10	.05	-.07	.37	.20	.28	-.32	.16	.11	.12
2. Rules and discipline	-.19	.15	-.07	.32	.43	-.01	-.04	.25^b	-.23	-.15
3. Counselor duties	.16	.11	.23	-.15	-.23	-.11	.45	-.08	-.08	.02
4. Perceived racial differences					NOT AVAILABLE					
5. Evaluation of facilities	-.15	.02	.04	.39	.13	.24	-.07	.17	-.17	-.01
6. Counseling practices	-.17	-.37	-.31	.03	-.20	.13	-.49	-.04	-.41	.23
7. Interpersonal relations of principal	-.02	.23	-.01	.09	.19	.03	.30	.15	-.51	-.35
8. Interpersonal relations with teachers	-.05	.28	.09	.24	.21	.04	-.02	.21	-.31	-.44
9. Interpersonal relations: parents, students	.04	.43	-.02	.53	.32	.28	.15	.58	.00	.10
10. Evaluation of race relations program					NOT AVAILABLE					
11. Evaluation of instructional program					NOT AVAILABLE					
12. Evaluation of human relations program					NOT AVAILABLE					
13. Evlauation of services					NOT AVAILABLE					

a. b. c. (See page 130)

[1] N=21 Schools

Table 4-7

Tenth Grade

Zero-Order Correlations between School Conditions and Student Race-Relations and Achievement Outcomes: 1975 Data[1]

	Teacher Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
		Black	White	Black	White	Black	White	Black	White	Black	White
1.	Teachers' racial attitude	-.18	-.21	.08	.72**	.26	.69**	.43*	-.04	.27	.12
2.	Support for integration	.05	.14	-.22	-.65**	-.38*	-.65**	-.36*	.04	-.20	-.25
3.	Absence of tension	.40*	.62**	.02	-.04	.13	-.03	-.09	.31	-.30	.12
4.	Teachers' job attitude	.28	.52**	-.30	-.47*	-.20	-.53**	-.26	.21	-.42*	-.17
5.	Interpersonal relations with students	.18	.27	.10	.07	-.11	.09	.33	.31	-.07	.21
6.	Interpersonal relations among teachers	.19	.34	-.01	.21	-.16	.11	.01	.24	-.19	.14
7.	Interpersonal relations of principal	.28	.46*	-.03	.32	-.03	.32	.03	.48*	-.14	-.06
8.	School autonomy	.29	-.07	.23	.26	.08	.39*	.29	.02	-.16	-.14
9.	Teacher autonomy	.09	-.12	.25	.27	.11	.36*	.21	.14	.05	-.07
10.	Inequality	-.09	-.56**	-.17	-.19	-.34	-.07	-.07	-.60**	.08	-.14
11.	Perceived racial differences					NOT AVAILABLE					
12.	Desegregation process	-.45*	-.45*	-.02	-.54*	-.25	-.53**	-.19	-.25	.21	-.08
13.	Teaching style (1)	.15	.04	.02	-.25	-.18	-.33	-.40*	-.31	-.42*	-.46*
14.	Teacher training					NOT AVAILABLE					
15.	Evaluation of principal	-.40*	-.54**	-.02	-.23	-.25	-.24	.00	-.40*	.03	-.22
16.	Multi-racial teaching					NOT AVAILABLE					
17.	Evaluation of school services					NOT AVAILABLE					
18.	Evaluation of human-relations program					NOT AVAILABLE					
19.	Evaluation of instructional program					NOT AVAILABLE					
20.	Teaching style (2)	.12	-.16	.24	.12	.07	.07	-.20	-.43*	-.25	-.40*

*significant at .05 level

**significant at .01 level (one-tailed tests)

[1] N=21 schools

Table 4-7 (Continued)

Tenth Grade

Zero-Order Correlations between School Conditions and Student Race-Relations and Achievement Outcomes: 1975 Data[1]

	Principal Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
		Black	White	Black	White	Black	White	Black	White	Black	White
1.	Principal's racial attitude	-.25	-.54**	.41*	.49**	.22	.52**	.36*	-.32	.19	-.23
2.	Support for integration	-.01	.15	-.53**	-.43*	.29	-.41*	-.21	.05	-.09	.20
3.	Absence of conflict: discipline					NOT AVAILABLE					
4.	Absence of conflict: racial issues					NOT AVAILABLE					
5.	Absence of conflict: ability grouping					NOT AVAILABLE					
6.	Absence of conflict: instructional change					NOT AVAILABLE					
7.	Absence of principal's personal conflict					NOT AVAILABLE					
8.	School SES	.61**	.25	.19	-.20	.09	-.06	.18	-.16	-.62**	-.68**
9.	Violent behavior	-.09	-.30	.18	.73**	.02	.69**	.22	.28	.28	-.13
10.	Principal's interpersonal relations	-.12	-.03	.35	.50**	.25	.27	.10	-.01	.18	-.08
11.	Inequality					NOT AVAILABLE					
13.	Principal's job attitude	-.53**	-.31	-.11	-.13	.22	-.08	-.30	-.17	.19	.02
14.	Evaluation of race-relations program					NOT AVAILABLE					
15.	Evaluation of instructional program					NOT AVAILABLE					
16.	Evaluation of human-relations program					NOT AVAILABLE					
17.	Evaluation of services					NOT AVAILABLE					

* significant at .05 level

** significant at .01 level (one-tailed tests)

[1] N=21 schools

Table 4-7 (Continued)

Tenth Grade

Zero-Order Correlations between School Conditions and Student Race Relations and Achievement Outcomes: 1975 Data[1]

Guidance Counselor Variables	Perceived School Racial Attitudes		Students' Personal Racial Attitudes		Racial Contact		School Fairness		Achievement	
	Black	White	Black	White	Black	White	Black	White	Black	White
1. Counselors' racial attitude	-.14	-.31	.20	.65**	.30	.60**	.15	-.05	.33	.10
2. Rules and discipline	-.09	.26	-.16	-.08	.24	-.30	-.18	.17	-.27	-.07
3. Counselor duties	.12	-.12	.41*	.10	-.02	.14	.53**	-.30	.03	-.03
4. Perceived racial differences					NOT AVAILABLE					
5. Evaluation of facilities	-.40*	-.05	.03	.34	.26	.20	-.06	.27	.23	.27
6. Counseling practices	-.23	-.44*	-.15	.30	-.01	.40*	-.18	.06	.34	.11
7. Interpersonal relations of principal	.00	.31	-.08	.02	.12	-.06	.11	.27	-.27	-.22
8. Interpersonal relations with teachers	.09	.38*	-.02	.12	.07	-.03	-.17	.35	-.25	-.39*
9. Interpersonal relations: parents, students	.02	.43*	-.07	.21	.22	.06	-.03	.56**	-.08	.01
10. Evaluation of race-relations program					NOT AVAILABLE					
11. Evaluation of instructional program					NOT AVAILABLE					
12. Evaluation of human-relations program					NOT AVAILABLE					
13. Evaluation of services					NOT AVAILABLE					

* significant at .05 level

** significant at .01 level (one-tailed tests)

[1] N=21 schools

measures was confirmed, by the definition presented previously. There was one substantial reversal: Warm and open interpersonal relationships between teachers and students was positively associated with white student achievement in 1975. The relationship was negative in 1976.

Results regarding white student race-relations outcomes held up much better. The measures based on teachers' responses were particularly successful. Twenty-three relationships of teacher measures with race relations outcomes were retested. Fifteen of them were confirmed by the definition presented above. Only a few principal and guidance counselor relationships were retested, and their cross-year success was less. There is one sizeable reversal of a relationship. In the 1975 analysis, the principals' racial attitude (P-1) is negatively related to the school racial attitude as perceived by white students. No explanation of this paradoxical finding is readily apparent.

The 1975 analysis gives support to the conclusion from the 1974 data that white students' attitudes are meaningfully associated with school conditions, especially when school conditions are measured by way of aggregated teachers' reports. The 1975 analysis gives emphasis to the importance of teachers' racial attitude, support for integration, interpersonal relationships between staff and students, an atmosphere free of tension, a positively functioning process of desegregation, and high evaluation of the principal by the teachers.

Discussion

The major findings regarding race relations in high schools may be summarized as follows:

1. Race relations are associated with several school characteristics. The most effective school conditions fall into the following categories: A principal who is evaluated highly by the faculty; teaching methods that emphasize multiracial curriculum material and teamwork; support for integration which is shared by teachers, administrators, and students; positive racial attitude of teachers; absence of tension and conflict concerning racial issues and other social and educational concerns; and warm and open relationships among teachers, students, and parents.

The racial attitudes and interracial contact of white students is more closely related to school conditions than are those of black students. The black students measure most often associated with school conditions is the description of the school as fair to them.

2. Achievement scores are not closely associated with school conditions when background conditions are statistically controlled.

3. The socioeconomic background of black students has a relationship with characteristics of schools. Lower black student SES is significantly associated with: poorer teachers' racial attitude, lack of support for integration, perception by teachers of differences between black and white students, absence of multiracial teaching practices, and low evaluation by principals of programs of instruction, race relations, and human relations.

Three conclusions seem warranted by way of summary of the relationships between student outcomes and school conditions. First, at both the elementary and secondary level there is clear evidence of overlap between good race relations among students and measurable characteristics of the faculty, administration, curriculum, training programs, and school policy. This result itself is important, in view of past speculations that school effects cannot be demonstrated apart from those of home and community. The relationships observed were independent of whether the students were rich or poor, Northern or Southern, urban or rural, predominantly black or predominantly white.

A second conclusion is that the relationships include some that are susceptible to intervention. They provide guides for the development of policies and strategies to improve the process of integration. The most clearly manipulable process variables, which have clear relationships with outcome, are those having to do with teaching methods and practices. The use of multi-ethnic curriculum material; the use of projects and discussions of racial issues; the assignment of white and black students to work with and play with one another; a teaching style that de-emphasizes warning and scolding; an emphasis on child-centered teaching methods; all of these variables predict indicators of good race relations. They are readily arranged by teachers and principals; they can be encouraged by school boards and superintendents; they can be made important objectives in program development and funding.

There are other characteristics of successful integrated schooling that can be influenced only slightly less directly. The racial attitudes of teachers are positive signs of good race relations. The racial attitude of a school's staff perhaps cannot be altered by decision or fiat. It can be improved, however, by selection, by training, and by reinforcement of the behaviors that go with positive racial attitude. A climate of interpersonal relations in which the staff is warm and friendly in dealing with students (and perhaps a bit more formal and professional in dealing with one another) is suggested by the results as one conducive to good race relations. Reduction of conflict and tension--whether a cause or effect of positive racial attitudes--is consistently associated with good race relations.

These are the findings that translate readily into actions. Another report from the present project is a Handbook for effective integrated schooling, which proposes plans of action based on intensive observations and interviews in successful schools. But principals, teachers, school boards, and curricular committees can also identify actions guided by results that are congruent to their own school situations.

The third conclusion is that the results are not plagued by the contradictions and incompatibilities so often associated with multivariate outcomes. There are a few complexities, to be sure. Interpersonal relations sometimes seem most effective if they are warm and open and, at other times, if they are more formal. One finding--that black student achievement in high schools is negatively related to principals' racial attitudes--can hardly be made a basis for conscientious school policy. But almost always there is no contradiction between measures associated with good outcomes for black and white students or with good race relations and good achievement. Based on the results presented in this chapter, it is possible to envision a program of actions to improve integration, a program with internal consistency and without built-in danger of undesired side effects.

The issues of correlation and causation must be faced. In the next chapter, we consider the degree to which subsets of the data are consistent with causal hypotheses. (The data base is too large and degrees of freedom too small for exploration of all plausible causal theories.) Still, the data are correlational data, and causation cannot be demonstrated unambiguously by using it. It is always possible, for example, that good student attitudes cause good faculty attitudes, or that both are caused by community characteristics.

Whatever the causal relationships might be, it is important to recognize that correlation itself has important policy-related implications. Consistency of direction among a wide range of indicators of race relations--obtained from a variety of sources--indicates that the multidimensional construct of race relations is amenable to treatment in a relatively straightforward way. It suggests that it is possible to describe schools as effective or ineffective in terms of race relations, and to identify patterns of variables that distinguish one from another.

Finally, empirical correlation in itself offers useful guidance for decisions. It reveals complexes of variables that covary, and thus feasible entry points into the system. It gives guidance to characteristics to be avoided because they are associated with undesirable outcomes. Such guidance is both valuable and hard to get in education. A system of correlational results, such as that obtained in this study, can be a critically important contribution to wise judgments and decisions.

Chapter 5

Causal Analyses of Student Outcomes

This chapter reports a series of analyses designed to identify causal relationships among variables. Student racial attitudes are the outcome variables that are the focus for all the analyses. The principal questions are these: Having demonstrated correlational relationships among process and outcome, to what degree can we infer causal relationships? Particularly, what causal relationships between process and outcome variables can be inferred?

Chapter 5 begins with a description of the methodology and its rationale. It then presents and evaluates structural models for the racial attitudes of black and white fifth graders. This discussion is extended by an analysis of the racial attitudes of white students, designed especially to clarify the causal significance of length-of-time integrated. The chapter then explores racial attitudes of black and white tenth graders. In each case, a general model is presented and analyzed. A second high school structural model for racial attitudes of black and white students, placing special emphasis on potentially manipulable school process variables, is then considered.

In relating the chapter to others in this report, one should bear in mind some of its specific features. First, the methodology of causal analysis places severe constraints on the number of variables that can be analyzed together (although providing a concomitant enrichment of the relationships that can be carefully explored). Moreover, the variables studied must be placed in a particular structural model. Both the selection of the variables and the shapes of the models have been judgmental. They were necessarily chosen from a very large number of sets of variables and postulated causal patterns that might have been studied. The analyses in this chapter were performed on the 1974 data base.

Second, the names for variables and measures used in this chapter do not correspond directly to those defined in other chapters. In causal models, composite measures are generated as a part of the total process of analysis. The particular composites depend on empirical relations among a given set of measures and on hypothesized structural relations. Therefore, it is important to interpret variables and measures in the light of the specific information given in this chapter. A list of variables used, with a key to the symbolism in the diagrams, is appended to this chapter. Composite measures are defined by the relationships presented in each diagram, and each should be interpreted with the aid of the relevant diagram.

Methods of Analysis

Problems arise in attempting to draw inferences from nonexperimental design data where a large number of outside factors influence the variables under consideration and their effects cannot be ruled out on the basis of randomization. Methodologies that allow causal inferences to be made in this instance have been developed for biology and economics but have only recently been applied to the social sciences.

Causal inference procedures begin with stating a verbal theory that is often depicted as a diagram (path model) making explicit the relationship hypothesized among a set of variables as well as the causal sequence thought to exist among them. Once the theory is stated, either verbally or pictorially, it must then be specified in mathematical language, which in turn permits empirical verification of the model underlying the theory. If the data do not confirm the model, or more specifically, parts of the model, the model may then be modified in light of known substantive theory and re-examined for goodness of fit. Since this interactive model building and testing approach starts with a substantive model based on the interpretation of theory, the final model is itself more likely to yield interpretable results than one based on strictly exploratory procedures which are only required to meet statistical criteria.

In this analysis, interpretive or explanatory path models were hypothesized and tested in an effort to estimate the direct and indirect determinants of attitudinal outcomes. These models were developed for both the black and white populations, and the resulting comparisons across subpopulations lead to statements of the differential importance of various predeterminers or "causes."

Figure 5-1a presents the general form of the type of models which were analyzed in this report. Such models imply that certain characteristics of

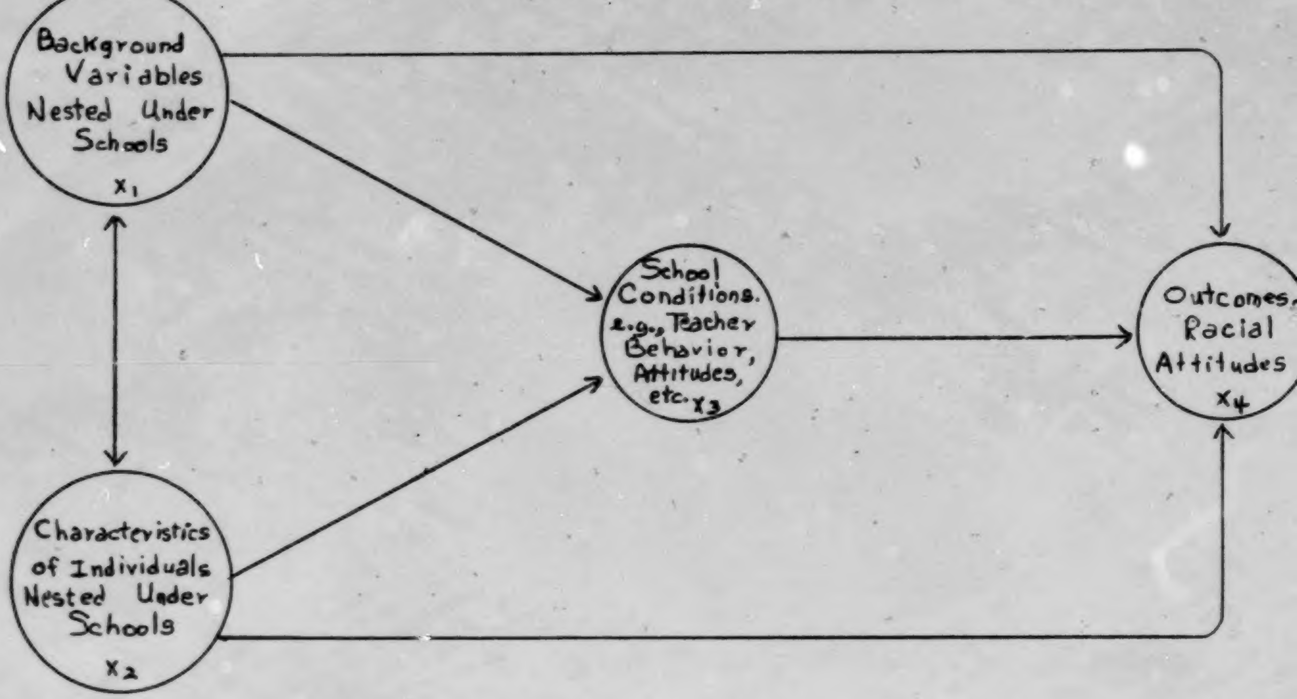
Background Variables Nested Under Schools x_1
Characteristics of Individuals Nested Under Schools x_2
School Conditions. e.g., Teacher Behavior, Attitudes, etc. x_3
Outcomes, Racial Attitudes x_4

Fig. 5-1a. General form of causal models presented in this report

students lead to teachers' and principal's attitudes, which in turn affect attitudes of the students. The result of applying path analysis techniques to such a priori logical models is a statement about the relative importance of background variables (e.g., SES) and mediating school conditions (e.g., teachers' racial attitudes) in determining student racial attitudes.

Figure 5-1b presents the more specific pictorial representation of a causal model, indicating the types of variables involved as well as their hypothesized relationships. Arrows going in one direction specify the direction of causality. Arrows between two variables going in both directions, as between X_1 and X_2, signify that one is unable or unwilling to assume the direction of causality. Path coefficients (b_{ij}) will be estimated for one-directional arrows, while correlations, r_{ij}, (no causal relationships) will be estimated for two-way arrows. The path coefficients are analogous to partial regression coefficients, and they will be so scaled that their relative size is proportional to their importance as a determinant. Succeeding figures will have the estimated path coefficients placed on their appropriate arrows.

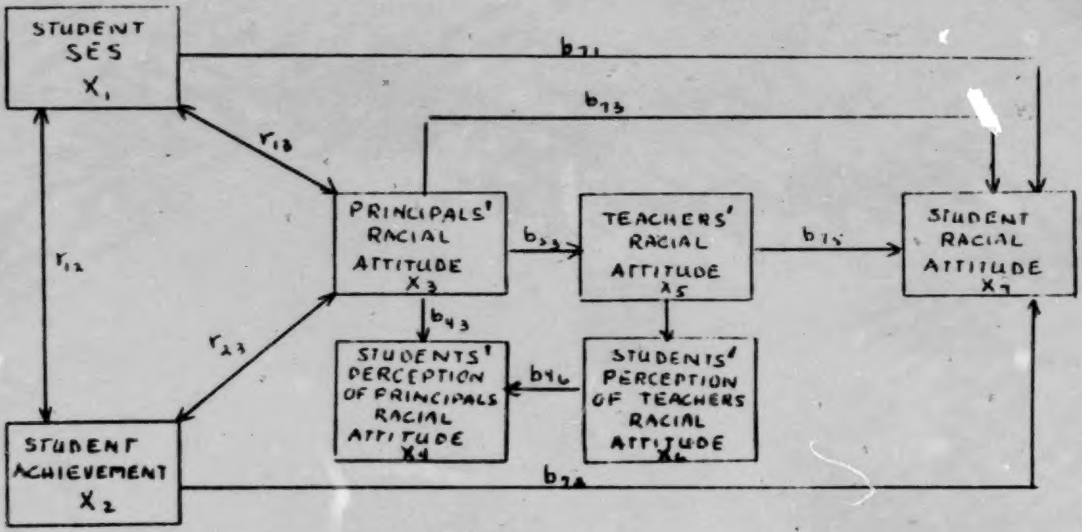
STUDENT SES X_1
b_{71}
b_{73}
r_{13}
r_{12}
PRINCIPALS' RACIAL ATTITUDE X_3
b_{53}
TEACHERS' RACIAL ATTITUDE X_5
b_{75}
STUDENT RACIAL ATTITUDE X_7
b_{43}
r_{23}
STUDENTS' PERCEPTION OF PRINCIPALS RACIAL ATTITUDE X_4
b_{46}
STUDENTS' PERCEPTION OF TEACHERS RACIAL ATTITUDE X_6
STUDENT ACHIEVEMENT X_2
b_{72}

Fig. 5-1b. A more specific causal model

The relative size of any given path coefficient, b_{ij}, may be interpreted as the relative direct influence of the variable at the tail of the arrow on the variable at the head of the same arrow. "Direct" in this sense is defined as the influence which remains after all other independent variables in the causal equation have been controlled. The total causal effect of one variable on another may have two estimable components: the direct effect, i.e., unmediated by any intervening variables; and the indirect effect which, of course, takes into consideration one or more intervening variables.

For example, in Figure 5-1b, there are two paths from principal's racial attitudes to students' racial attitudes. The direct effect of principal's racial attitudes is estimated by the path coefficient, b_{73}, which is associated with the single direct path. The indirect effect of principal's racial attitudes on students' racial attitudes is the product $(b_{53}) \cdot (b_{75})$. That is, the products of the remaining one-way path from principal's racial attitude to students' racial attitude yield the indirect effects. The total hypothesized principal effects on students' racial attitudes is then simply $b_{73} + (b_{53}) \cdot (b_{75})$. Tables of the hypothesized direct and indirect effects of each explanatory variable on its respective dependent variables accompany each pictorial diagram.

There are a number of methods for estimating the path coefficients, but the maximum likelihood estimation procedures used in Jöreskog's Lisrel model (1972) is generally considered optimal since it provides simultaneous estimation of all parameters (path coefficients) as well as an overall goodness-of-fit test. More importantly, it allows the simultaneous estimation of "causal" relationships between constructs of unmeasured variables. That is, when we have multiple measures of some construct(s), we can get a "pure" or error-free estimate of this construct, as well as its "causal" relationship with other variables and constructs in the system.

For example, rather than use by itself any one of the error-prone observed measures to be a proxy for a concept such as SES, we can elect to make use of all the information (e.g., father's education and/or occupation, mother's education, etc.) available in estimating a single composite construct called SES. Such composite constructs are similar to factor scores, but are not subject to the estimation errors involved in computing factor scores from observed measures. One can think of the structural or path coefficients which estimate the causal effect of one construct on another as being corrected for attenuation where the correction factor is more closely akin to the communality than to the reliability. Thus, through the use of the Lisrel model, we can minimize the dilution effects of measurement error through the use of unmeasured variables. Furthermore, the structural model approach leads to the formulation of these constructs or composite variables on both a rational and a statistical basis. Since the maximum likelihood estimation procedure is simultaneous, all information available is used in their estimation.

Causal Analyses of Elementary School Data

Three separate structural models of fifth grade data were analyzed. The first examines effects of SES, achievement, and the racial attitudes of teachers and principals on the racial attitudes of black and white students. The second examines effects of SES differences, achievement differences, time integrated, school climate, and teaching style. The third model looks at racial attitudes of black and white students combined, with special emphasis on effects of racial contact practices and classroom race relations.

Model I. Effects of SES, Achievement, and Racial Attitudes of Teachers and Principals

Figures 5-2a and 5-2b present the results of solving the structural equations underlying the hypothesized causal model for black and white students respectively. Given this hypothesized model, maximum likelihood estimation procedures were used to generate a unique-population variance-covariance matrix which, in the maximum likelihood sense, maximized the likelihood of the observed variance-covariance matrix. The resulting path coefficients were rescaled (standardized) for ease of interpretation. Relative sizes of path coefficients within samples can be compared and contrasted. However, comparison of the absolute size of corresponding standardized path coefficients across subpopulations should be interpreted cautiously unless the variances (true variances in the case of unmeasured variables) are approximately the same (Schoenberg, 1972). Thus, all conclusions concerning differences in magnitude of courses based on comparing absolute sizes of path coefficients across subpopulations will only be made if the variances are relatively the same.

In Figures 5-2a and 5-2b the circles represent unmeasured or "true" variables (constructs) and the rectangles represent observed or fallible variances.* Therefore, in Figure 2b, SES, achievement, self-perception, teachers' racial attitudes, and students' racial attitudes are all constructs measured without error. The squares clustered around the circles are the indicators of that particular unmeasured variable, construct, or factor (the terminology can be considered synonymous). The numbers associated with the arrows going from the unmeasured variable to its indicators may be interpreted as factor loadings. In a sense, then, path analysis with unmeasured variables (factors) can be considered to be a combination of factor analysis and multivariate regression, where both the factors and the directions of the regression among factors are fitted according to some underlying theory.

Figure 5-2a presents the results pictorially for the fifth grade black students. The school is the unit of analysis here, so the resulting correlations

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*The appendix to this chapter presents a more complete description of of the measures involved in the models as well as in the direction of scoring.

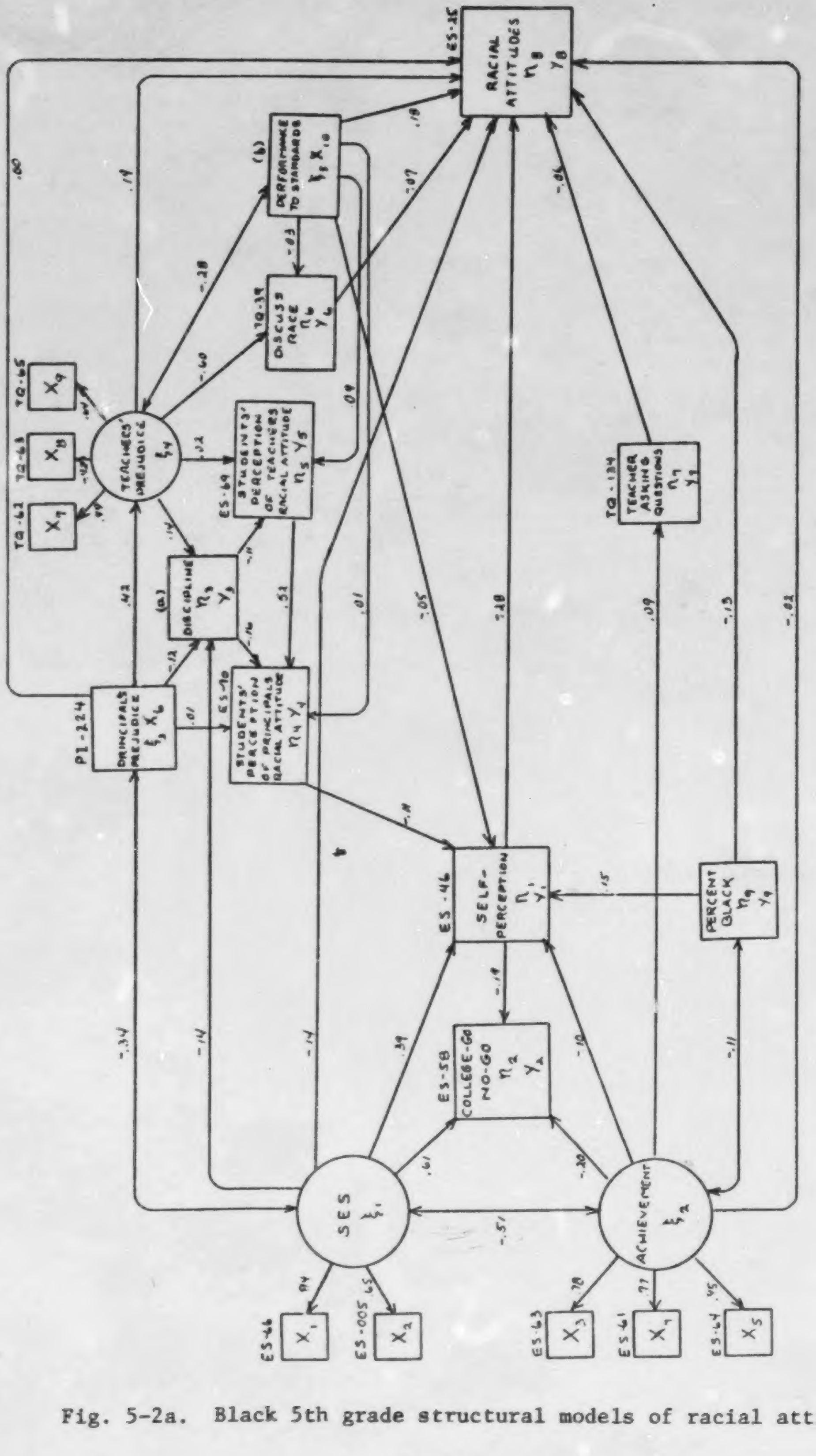

RACIAL ATTITUDES η_8 Y_8
ES-25
PERFORMANCE TO STANDARDS ξ_5 X_{10}
(b)
DISCUSS RACE η_6 Y_6
TQ-39
TEACHERS' PREJUDICE ξ_4
X_7
X_8
X_9
TQ-62
TQ-63
TQ-65
STUDENTS' PERCEPTION OF TEACHERS RACIAL ATTITUDE η_5 Y_5
ES-69
DISCIPLINE η_3 Y_3
(a)
STUDENTS' PERCEPTION OF PRINCIPALS RACIAL ATTITUDE η_4 Y_4
ES-70
PRINCIPALS PREJUDICE ξ_3 X_6
PI-224
TEACHER ASKING QUESTIONS η_7 Y_7
TQ-134
SELF-PERCEPTION η_1 Y_1
ES-46
PERCENT BLACK η_9 Y_9
COLLEGE-GO NO-GO η_2 Y_2
ES-58
SES ξ_1
ACHIEVEMENT ξ_2
X_1
X_2
X_3
X_4
X_5
ES-46
ES-005
ES-63
ES-61
ES-64
.00
.19
.19
-.28
-.03
.07
-.60
.09
.12
.14
.42
-.12
.01
.52
.01
-.05
.28
-.06
.09
-.13
-.02
-.34
-.14
-.14
.39
.61
-.51
-.20
-.10
-.11
.15
-.14
.94
.65
.78
.77
.45

Fig. 5-2a. Black 5th grade structural models of racial attitudes

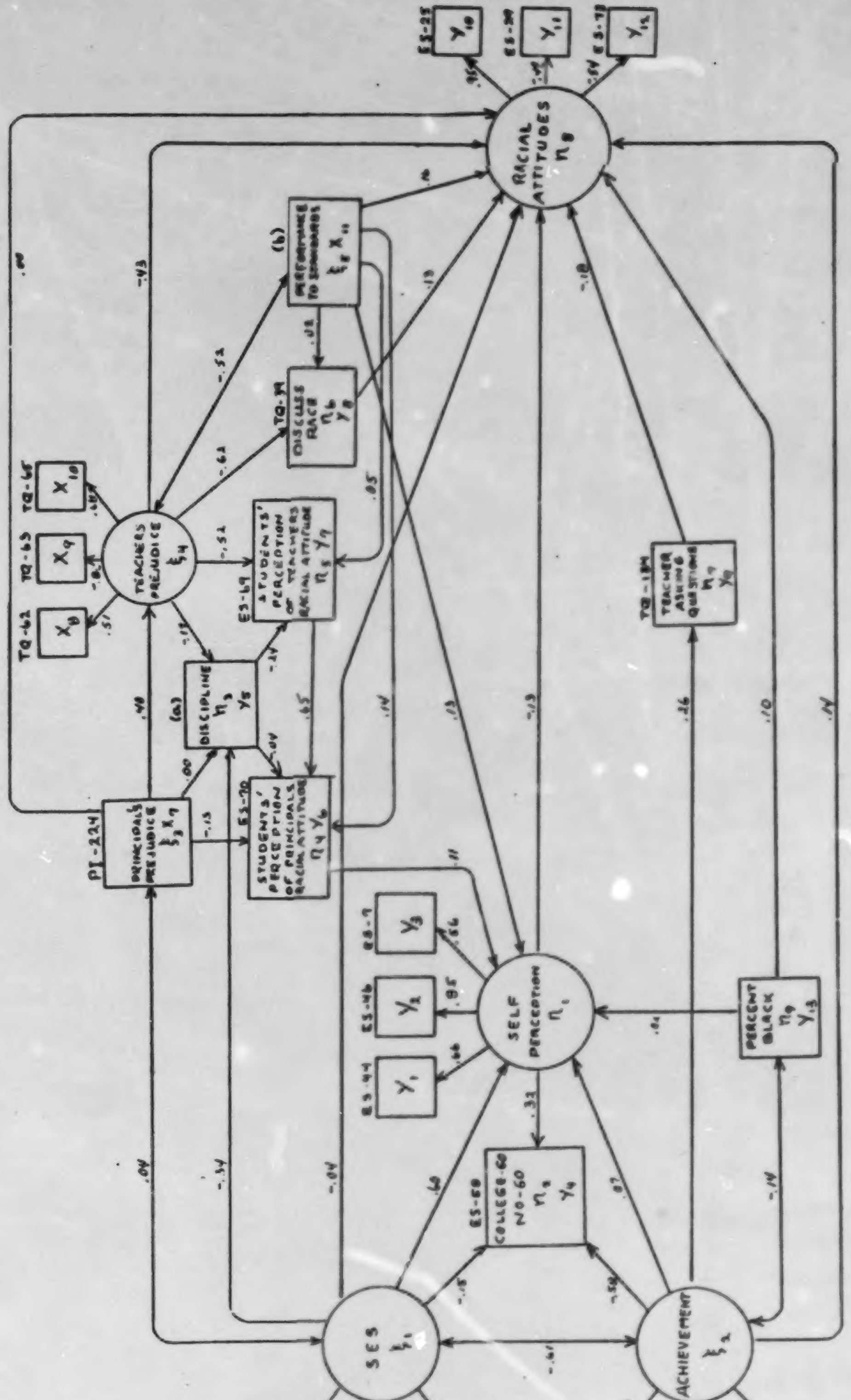

RACIAL ATTITUDES η_8
SELF PERCEPTION η_1
SES ξ_1
ACHIEVEMENT ξ_2
TEACHERS PREJUDICE ξ_4
PRINCIPALS PREJUDICE ξ_3 X_7
STUDENTS' PERCEPTION OF PRINCIPALS RACIAL ATTITUDE η_4 Y_6
STUDENTS' PERCEPTION OF TEACHERS RACIAL ATTITUDE η_5 Y_7
DISCIPLINE η_3 Y_5
(a)
DISCUSS RACE η_6 Y_8
PREFERENCE TO STANDARDS ξ_5 X_{11}
(b)
TEACHER ASKING QUESTIONS η_7 Y_9
PERCENT BLACK η_9 Y_{13}
COLLEGE-60 NO-60 η_2 Y_4
X_1
X_2
X_3
X_4
X_5
X_6
X_8
X_9
X_{10}
Y_1
Y_2
Y_3
Y_{10}
Y_{11}
Y_{12}
ES-66
ES-005
ES-32
ES-63
ES-61
ES-64
ES-44
ES-46
ES-7
ES-60
ES-70
ES-69
ES-25
ES-29
ES-73
PT-224
TQ-62
TQ-63
TQ-65
TQ-39
TQ-184

Fig. 5-2b. White 5th grade structural models of racial attitudes

and regression weights are based on school means. Inspection of the path diagram discloses that the most reliable indicator of SES for fifth grade black students is X_1, the number of brothers and sisters. Whether or not the child owns a bicycle (X_2) has a considerably smaller loading, .65 vs. .84, on the SES factor. Turning to Figure 5-2b, the fifth grade white student results, one notes that the best indicator of SES is X_2, whether or not the child owns a bicycle. The white subpopulation also has a third indicator, whether or not the family owns its own home, which did not appear for the black fifth grade subpopulation. The SES construct differs for the two racial groups. The difference appears in the internal structure of the measure as well as in its relationships with outside variables. For example, black student SES has a proportionately greater effect on reported intentions of going to college than it has on self-perception. White student SES plays just the reverse role for fifth graders. That is, for white students, SES has a much greater impact on self-perception than on college-going plans. The reader will note that self-perception is measured by a single item for blacks, having to do with whether they think they "can do things as well as other students." The remaining self-perception items have to do with whether they are satisfied with themselves or whether they can do their school work as well as others; both of these did not cluster for black students (unlike white students). This indicates a complex or compartmentalized self-concept in the case of the black fifth graders.

The "true" correlation between SES and achievement is -.51 and -.61 for black and white students respectively. The term "true," of course, indicates the relationship between SES and achievement when the errors of measurement are removed through the use of multiple indicators for each of the two constructs.

It is also interesting to note the achievement factor has a similar loading pattern for black and white students. That is, in both groups, the most reliable measure of achievement is the test measuring basic concepts, although for black students it is a proportionately more reliable indicator of achievement. It should be remembered here that the factor patterns for the unmeasured variables, SES, achievement, etc. are not solved for independently of their relationships with other variables in the system. That is, all information available is used in the maximum likelihood simultaneous solution, and therefore the obtained loadings reflect the "best fitting" using all the information simultaneously.

Another salient difference between the two groups is the proportionately greater effect of measured achievement on college-going intentions for white students (-.58 for white vs. -.20 for black students). It would seem that SES is a primary determinant of college-going plans for black students while measured achievement is more important for white students. This difference may reflect a realistic appraisal by the black child of his family's willingness and ability to provide the money required to attend college.

Tables 5-2a and 5-2b for black and white students, respectively, give a complete summary of the direct, indirect, and total effects (total = indirect + direct) of each hypothesized explanatory variable on the respective dependent variables. This is a necessary supplement to the path diagram since the total and indirect effects are not directly available (i.e., without further computation) from the path diagram.

Inspection of Tables 5-2a and 5-2b reveals the two largest total effects on self-perception for black students to be SES (.39) and percent of black students in the school (-.15). In other words, the higher the family SES and the greater the percentage of black students, the more positive the self-concept of black students.

For white students, self-concept is relatively independent of the percentage of black students, but is primarily a function of SES and to some degree of the perceived principal's and teachers' racial attitude. That is, high SES black students, like white students, tend toward a positive self-concept yet perceive the principal as racially biased.

The results presented in Tables 5-2a and 5-2b with respect to the determinants of college-going intentions were discussed earlier in reference to the path diagram. We therefore proceed now to evaluating the hypothesized determinants of the teachers' perception of the relative extent of discipline problems in the two subpopulations. The negative correlation (-.34) between white SES and the proportion of black students who are discipline problems suggests that the higher the white SES level within a school, the more likely it is that the teacher will feel the black students to be a discipline problem. A similar, although weaker, relationship holds for the black sample. The path coefficient (-.17) in the white sample between teacher prejudice and proportion of black students who are discipline problems suggests that the less prejudiced teachers consider the black students to be less of a discipline problem. Conversely, the interpretation of the same path coefficient for the black sample suggests (albeit weakly) that the less prejudiced teachers are more likely than the racially prejudiced teachers to consider the white students a discipline problem.

White students' perception of a principal's racial attitude is almost independent of the principal's actual racial attitude and is almost entirely a function of the students' perception of the teachers' racial attitude, which in turn appears to be a function of principal's racial attitude. That is, the causal mechanism appears to be as follows for white students:

Table 5-2a

Direct and Indirect Effects on Dependent Variables by Hypothesized Causes

(Black - 5th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Self-Perception (R = .45)			
SES	.39	-.00	.39
Achievement	-.10	-	-.10
Principal's Prejudice	-	.00	-.00
Teacher's Prejudice	-	.00	.00
Performance to Standards	-	-.01	-.01
Discipline	-	.02	.02
Student's Perception of Principal's Racial Attitude	-.11	-	-.11
Student's Perception of Teacher's Racial Attitude	-	-.06	-.06
Percent Black	-.15	-	-.15
College-Go No-Go (R = .68)			
SES	.61	-.07	.54
Achievement	-.20	.02	-.18
Principal's Prejudice	-	.00	.00
Teacher's Prejudice	-	-.00	-.00
Performance to Standards	-	.01	.01
Self-Perception	-.19	-	-.19
Discipline	-	-.00	-.00
Student's Perception of Principal's Racial Attitude	-	.02	.02
Student's Perception of Teacher's Racial Attitude	-	.01	.01
Percent Black	-	.03	.03

Table 5-2a (Continued)

Direct and Indirect Effects on Dependent Variables by Hypothesized Causes

(Black - 5th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Discipline (R = .22)			
SES	-.14	-	-.14
Principal's Prejudice	-.12	.06	-.06
Teacher's Prejudice	.14	-	.14
Student's Perception of Principal's Racial Attitude (R = .59)			
SES	-	.03	.03
Principal's Prejudice	.01	.04	.05
Teacher's Prejudice	-	-.02	-.02
Performance to Standards	.01	.05	.06
Discipline	-.16	-.06	-.22
Student's Perception of Teacher's Racial Attitude	.52	-	.52
Student's Perception of Teacher's Racial Attitude (R = .14)			
SES	-	.02	.02
Principal's Prejudice	-	.02	.02
Teacher's Prejudice	.02	-	.02
Performance to Standards	.09	-	.09
Discipline	-.11	-	-.11
Discuss Race (R = .59)			
Principal's Prejudice	-	-.25	-.25
Teacher's Prejudice	-.60	-	-.60
Performance to Standards	-.03	-	-.03
Teacher Asking Questions (R = .09)			
Achievement	.09	-	.09

Table 5-2a (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(Black - 5th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Racial Attitudes (R = .48)		
SES	-.14	-.11	-.25
Achievement	-.02	.02	.00
Principal's Prejudice	.00	.08	.08
Teacher's Prejudice	.19	.04	.23
Performance to Standards	.18	.02	.20
Self-Perception	-.28	-	-.28
Discipline	-	-.01	-.01
Student's Perception of Principal's Racial Attitude	-	.03	.03
Student's Perception of Teacher's Racial Attitude	-	.02	.02
Discuss Race	-.07	-	-.07
Teacher Asking Questions	-.06	-	-.06
Percent Black	-.13	.04	-.09

Table 5-2b

Direct and Indirect Effects on Dependent Variables by Hypothesized Causes

(White - 5th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Self-Perception (R = .69)		
SES	.60	.02	.62
Achievement	.07	-	.07
Principal's Prejudice	-	.00	.00
Teacher's Prejudice	-	-.03	-.03
Performance to Standards	.13	.02	.02
Discipline	-	-.02	-.02
Student's Perception of Principal's Racial Attitude	.11	-	.11
Student's Perception of Teacher's Racial Attitude	-	.07	.07
Percent Black	-.02	-	-.02
	College-Go No-Go (R = .66)		
SES	-.15	.19	.04
Achievement	-.58	.02	-.56
Principal's Prejudice	-	-.00	-.00
Teacher's Prejudice	-	-.01	-.01
Performance to Standards	-	.05	.05
Self-Perception	.32	-	.32
Discipline	-	-.01	-.01
Student's Perception of Principal's Racial Attitude	-	.04	.04
Student's Perception of Teacher's Racial Attitude	-	.02	.02
Percent Black	-	-.01	-.01

Table 5-2b (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(White - 5th Grade)

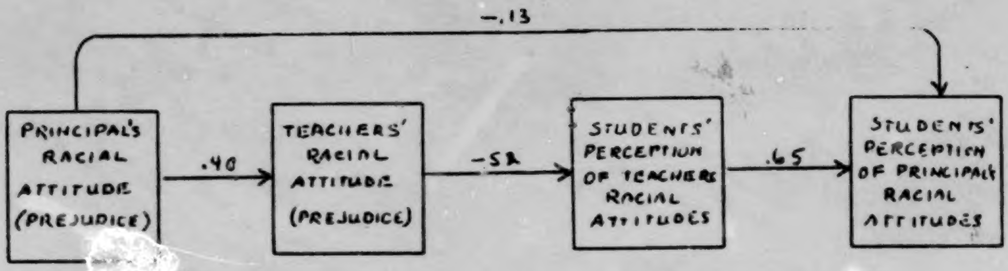
Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Discipline (R = .37)			
SES	-.34	-	-.34
Principal's Prejudice	.00	-.07	-.07
Teacher's Prejudice	-.17	-	-.17
Student's Perception of Principal's Racial Attitude (R = .76)			
SES	-	.07	.07
Principal's Prejudice	-.13	-.12	-.25
Teacher's Prejudice	-	-.30	-.30
Performance to Standards	.14	.03	.17
Discipline	-.04	-.16	-.20
Student's Perception of Teacher's Racial Attitude	.65	-	.65
Student's Perception of Teacher's Racial Attitude (R = .57)			
SES	-	.08	.08
Principal's Prejudice	-	-.19	-.19
Teacher's Prejudice	-.52	.04	.48
Performance to Standards	.05	-	.05
Discipline	-.24	-	-.24
Discuss Race (R = .63)			
Principal's Prejudice	-	-.25	-.25
Teacher's Prejudice	-.62	-	-.62
Performance to Standards	.02	-	.02
Teacher Asking Questions (R = .26)			
Achievement	.26	-	.26

Table 5-2b (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(White - 5th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
		Racial Attitudes (R = .64)	
SES	-.04	-.08	-.12
Achievement	.14	-.06	.08
Principal's Prejudice	.00	-.17	-.17
Teacher's Prejudice	-.43	-.00	-.43
Performance to Standards	.16	-.02	.14
Self-Perception	-.13	-	-.13
Discipline	-	.00	.00
Student's Perception of Principal's Racial Attitude	-	-.01	-.01
Student's Perception of Teacher's Racial Attitude	-	-.01	-.01
Discuss Race	.13	-	.13
Teacher Asking Questions	-.18	-	-.18
Percent Black	.10	.00	.10


-.13
PRINCIPAL'S RACIAL ATTITUDE (PREJUDICE)
.40
TEACHERS' RACIAL ATTITUDE (PREJUDICE)
-.52
STUDENTS' PERCEPTION OF TEACHERS RACIAL ATTITUDES
.65
STUDENTS' PERCEPTION OF PRINCIPAL'S RACIAL ATTITUDES

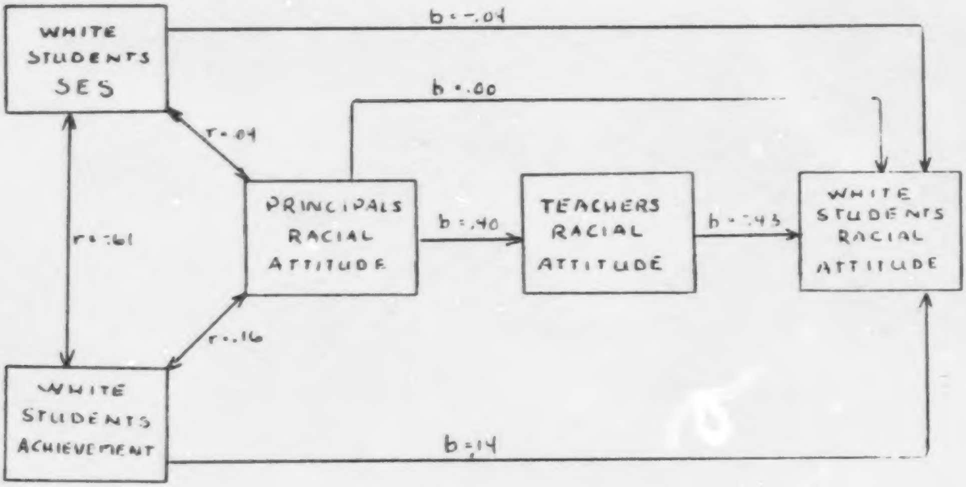
That is, the white students' contact with the principal is relatively minimal and, as a result, students attribute to the principal the same views and biases of the teachers. There is an important difference here, however, for the black students. The one large difference for black students in the causal link outlined above is that there is no relationship between the black fifth graders' perception of teachers' racial attitude and the teachers' reports of their racial attitude. It would appear that the black fifth graders have either desensitized themselves to cues of their teachers' racial views or the teachers' perceived behavior is not consistent with respect to their reported views. It may well be that the teachers may compensate in behavior for their true feelings with respect to racial integration. It is also interesting to note that white students tend to perceive those teachers as racially biased who report that blacks are not a proportionately greater discipline problem. Conversely, and more understandably, the black students are somewhat more likely to perceive the teachers' racial attitudes as biased if teachers report that they have a proportionately smaller discipline problem with the white fifth graders.

Turning to Tables 5-2a and 5-2b, we note that in schools with less prejudiced teachers there is more likely to be discussion of race in class. Also, for white fifth graders, there is a positive correlation (r=.39) between students' perceptions of a teacher as unbiased and the frequency with which race is discussed in class. The corresponding correlation for black fifth graders is .02 indicating that black students do not link discussions of race with a positive perception of their teachers' racial views. This is consistent with the earlier finding that the determinants of a black fifth grader's perception of his or her teacher's racial attitude are different from those of a fifth grade white child. The suggestion here seems to be that black fifth graders may be perceiving some of the same racial cues as the whites, with respect to teachers' racial attitudes, yet their interpretation is different.

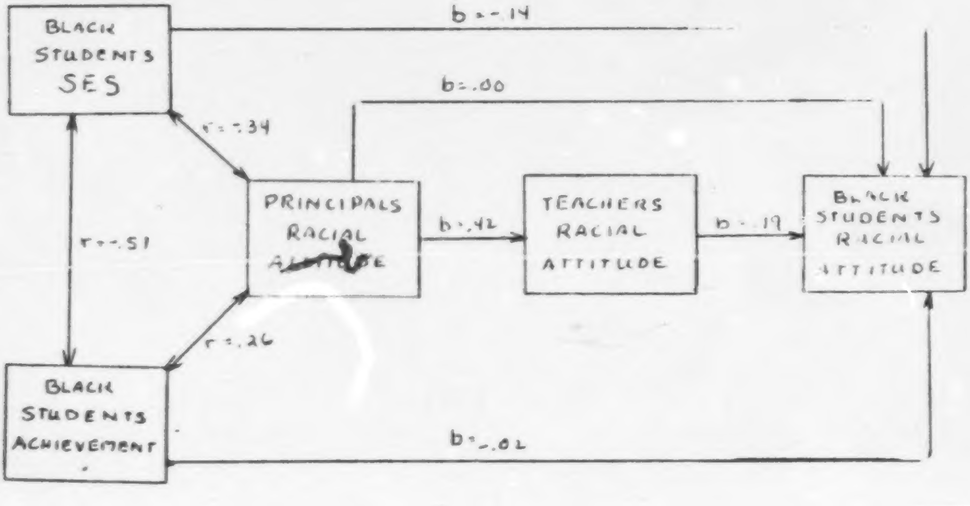
Turning to Figure 5-2b, the relationship between the teachers' self-reports, their racial attitudes, and whether or not teachers feel black students are performing at grade level is quite high (r = +.52). That is, those teachers whose self-reports reflect negative attitudes toward living in integrated neighborhoods, intermarriage, etc., also feel that their black students are not performing at grade level. Interestingly enough, when one examines the same correlation for the black population (Figure 5-2a) a somewhat similar, although considerably more attenuated, relationship (r = .28) still holds. That is, those teachers who report that they have negative attitudes toward integration, etc., are also more likely to feel that the white students are not performing up to grade level. One possible explanation for this rather consistent result is that the more prejudiced teachers may tend to be more demanding with respect to their students' performance than those teachers with more liberal views with respect to integration.

As reported in Chapter 3, both teachers' racial attitudes and principals' racial attitudes are correlated with the racial attitudes of white students. However, when the complete set of background variables is partialed out, the correlations drop substantially. The path analysis permits a more detailed analysis of these relationships. In the context of the set of variables examined here, teachers' racial attitudes have the greatest direct effect on white students' racial attitudes. Principals' racial attitudes have an indirect effect, working through teachers' racial attitudes.

Inspection of Figure 5-2b and Table 5-2b (white subgroup) indicates that for white fifth graders by far the greatest determinant of students' positive racial attitudes is the teachers' racial attitude (b = .43). That is, the more positive the teachers' self-reported attitude toward integration, the more positive the white fifth graders' attitude toward having black friends, etc. The rather complex relationships between some of the determinants of racial attitudes can be best understood if we take and diagram a segment of the larger model. Thus, for white students we have:


WHITE STUDENTS SES
b = -.04
b = .00
r = .04
r = .61
PRINCIPALS RACIAL ATTITUDE
b = .40
TEACHERS RACIAL ATTITUDE
b = .43
WHITE STUDENTS RACIAL ATTITUDE
r = .16
WHITE STUDENTS ACHIEVEMENT
b = .14

and for black students we have:


BLACK STUDENTS SES
b = -.14
b = .00
r = .34
r = -.51
PRINCIPALS RACIAL ATTITUDE
b = .42
TEACHERS RACIAL ATTITUDE
b = .19
BLACK STUDENTS RACIAL ATTITUDE
r = .26
BLACK STUDENTS ACHIEVEMENT
b = -.02

A comparison of the above two models suggests that although principals have essentially no direct effect on student racial attitudes, they have a relatively large indirect effect on the students' racial attitudes working through the teachers. Since this indirect effect of principals appears to be particularly important for white student racial attitudes, it would seem necessary to further explore the correlates of the principal's racial attitude. The diagrams for black and white students above suggest that the SES of white students has little to do with principal's racial attitude while the SES of a school's black students does. That is, the higher the SES of the black students, the more likely the principal is to have a positive racial attitude. Similarly, the higher the black student achievement, the more likely the principal will be to have a positive racial attitude. Whether or not the SES and achievement of black students can be considered determinants or simply correlates (as we have depicted them) of principal's racial attitude, the important point here is that whatever may change the principal's attitude will in turn influence the teachers' and finally the child's attitude. At least that particular causal chain seems to provide a reasonable fit to the data for white fifth graders.

Consistent with our earlier discussion of the determinants of black fifth graders' perception of the teachers' racial attitude, there also seems to be little in the present model to explain black fifth graders' racial attitudes. Teachers' prejudice seems to have a moderate inverse effect on black student racial attitudes. That is, black fifth graders who would like to have friends of another race tend to have teachers with negative racial attitudes. What does appear to be clear here is that black and white fifth grade students do not seem to react in the same way to their teachers' self-reported attitudes. This result appears to be consistent with the fact pointed out earlier, that black and white students in the fifth grade, for the most part, do not have similar perceptions of their teachers' racial attitudes.

However, one determinant of racial attitudes that seems to have a consistent and a rather interesting effect on students' racial attitudes is the students' self-perceptions. Regardless of whether students are black or white, the more positive their feelings about themselves, the less likely they are to wish to have friends of another race. This relationship is considerably stronger for black than for white students (-.28 vs. -.13), and may be simply an expression of black self-awareness. The effect of whether or not black students "perform up to standards" also has an impact on white racial views. That is, the more likely it is that black students are perceived as not meeting standards (by the teachers) the more negative the white fifth graders' racial attitudes. Interestingly enough, black fifth graders also are more likely to wish "to have more friends of another race" if that race is performing up to the teacher's expectations.

The reader will note that for the white sample, there are three indicators of racial attitudes: "would you like more friends of a different race" (y_{10}), "are you afraid of teachers of a different race" (y_{11}), and the question of whether..."color has anything to do with smartness" (y_{12}). The three indicators did cluster somewhat for whites, but there was little interrelationship for black students. This appears to indicate that for black students, whether or not they would like more friends of a different race has little to do with whether or not they feel color has anything to do with smartness (y_{12}) or whether they are "afraid" of a teacher of the opposite race (y_{11}). For white students, whether or not they would like to have a friend of the opposite race is tied to some extent to whether or not they feel "color has nothing to do with smartness" and to a lesser extent, fear of teachers of the opposite race. As with self-concept, it appears that black students' racial attitudes are rather complex and possibly compartmentalized.

Model II. Effects of Black-White SES and Achievement Differences, Length-of-Time Integrated, School Climate, and Teaching Style

The following analysis considers several variables that were not analyzed previously, but that have been postulated to have a causal effect on racial attitude. They are, specifically, similarity of white and black students in SES and achievement and length-of-time integrated.

White fifth graders. As inspection of the one-way arrows in Figure 5-3a indicates, we have postulated that black-white SES differences are prior to achievement differences. Both SES and achievement differences are considered prior to (1) teacher-parent climate, (2) teaching style, and (3) white racial attitudes. Time integrated is prior to climate, teaching style, and white racial attitudes. Climate and teaching styles are prior only to white racial attitude.

The indicators of SES and achievement were relatively reliable for difference scores as were the three achievement difference scores. The lowest reliability was for the number of siblings $(.62)^2 = .38$, and the highest was the achievement difference indicator, basic concepts $(.89)^2 = .79$. The standardized path coefficient indicating the effect of SES differences on achievement differences is relatively large, $b^* = .44$. However, more interesting relationships were found in the correlations between SES differences, achievement differences, and the length of time the school has been integrated. That is, the correlation between white-black SES differences and time integrated is $r = .28$, indicating that the longer the school is integrated the smaller the white-black SES differential.[1]

---

[1] For some items the coding of the scales was often in the reverse direction from what one might normally expect. Because of this, the reader may feel that the interpretation is not always consistent with the sign of the path coefficient or correlation under study. The reader may satisfy himself as to the correctness of the interpretation by examining the item scale codings in the appendix to Chapter 5.

There may be a selection factor operating. That is, either the high SES whites or the low SES blacks are moving to different schools. Another possibility is that schools with relatively homogeneous student populations integrated earlier. A similar but smaller relationship is found between achievement differences and length of time integrated (r = .15). The longer the school is integrated, the smaller the difference between black and white achievement. If one forgets the SES relationship, a "happy" interpretation of this would be that the longer blacks are in an integrated school, the more likely their achievement scores will approach that of the whites. However, considering the relationship between SES differences and achievement differences and length of integration, a more likely explanation is that SES differences mediate the relationship between achievement differences and time integrated.

Inspection of the determinants of climate as measured by warmth of teacher-parent contact indicates that, holding constant academic achievement, the greater the white-black SES difference, the less the warmth of teacher-parent contact. Conversely, the greater the white-black achievement differences, in the absence of SES differences, the greater the parent-teacher contact. In summary, one would have to say that white-black differences in SES are somewhat more important than achievement differences in influencing parent-teacher contact. This conclusion is justified on the basis of the larger path coefficient for SES differences (-.27 vs. .19) as well as the indirect effect of SES differences "working" through achievement differences. (See Table 5-3a).

The next most important determiner of climate is length-of-time integrated (path coefficient = -.29). That is, the longer the school is integrated, independent of both SES differences and achievement differences, the greater the warmth of openness of teacher-parent contact.

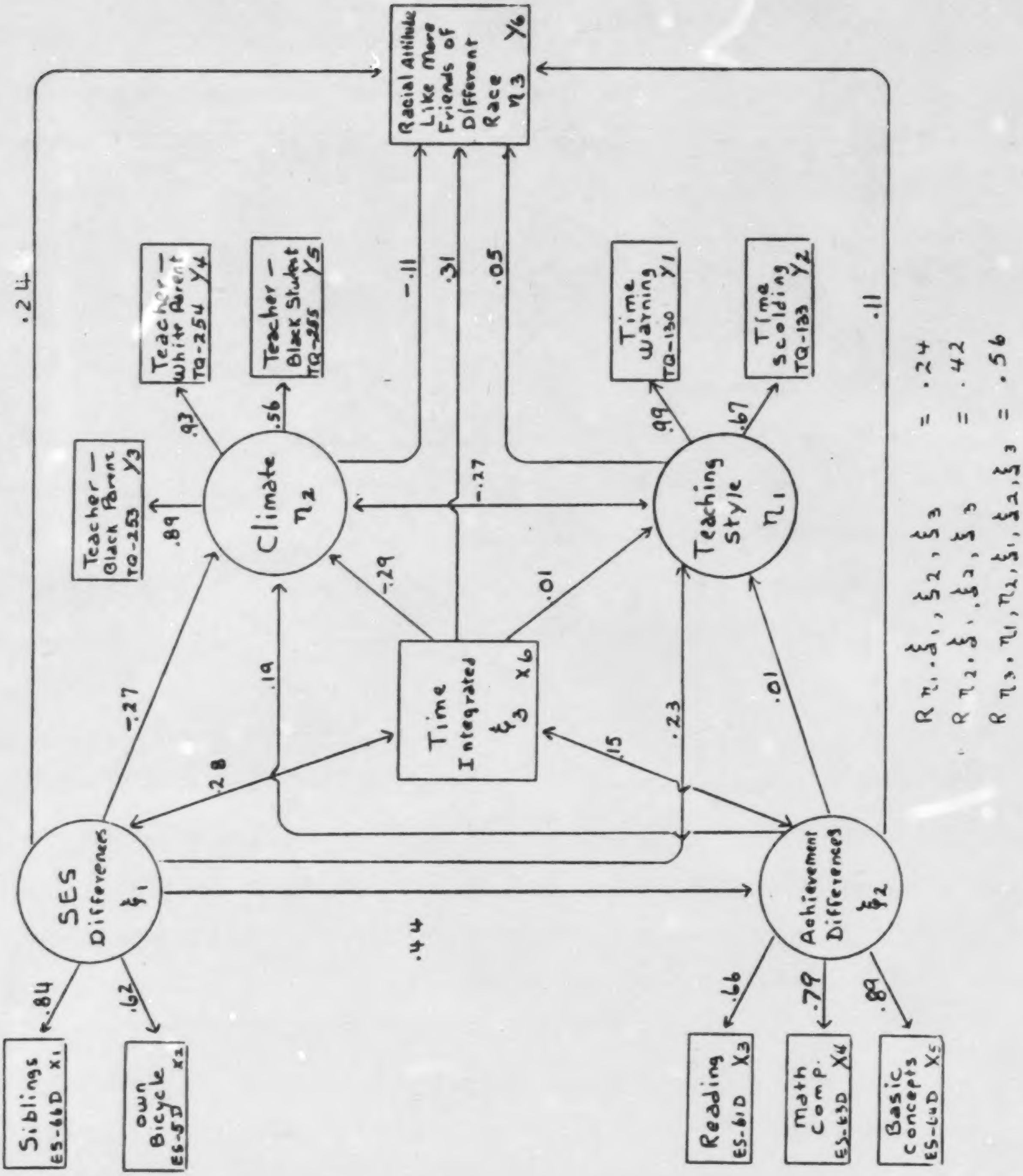

Racial Attitude Like More Friends of Different Race η3 Y6
.24
-.11
.31
.05
.11
Teacher — White Parent TQ-254 Y4
Teacher — Black Student TQ-255 Y5
Teacher — Black Parent TQ-253 Y3
.93
.56
.89
Climate η2
Time Warning TQ-130 Y1
Time scolding TQ-133 Y2
.99
.67
Teaching Style η1
-.27
-.29
.01
Time Integrated ξ3 X6
-.27
.19
.28
.15
.23
.01
SES Differences ξ1
Achievement Differences ξ2
.44
.84
.62
Siblings ES-66D X1
own Bicycle ES-5D X2
.66
.79
.89
Reading ES-61D X3
Math Comp. ES-63D X4
Basic Concepts ES-64D X5
R η1 . ξ1, ξ2, ξ3 = .24
R η2 . ξ1, ξ2, ξ3 = .42
R η3 . η1, η2, ξ1, ξ2, ξ3 = .56

Figure 5-3a

Explanatory model for "Would you like more friends of different race?"

White fifth graders

Table 5-3a

Direct and Indirect Effect for "Would You Like More Friends of a Different Race?"

White Fifth Graders

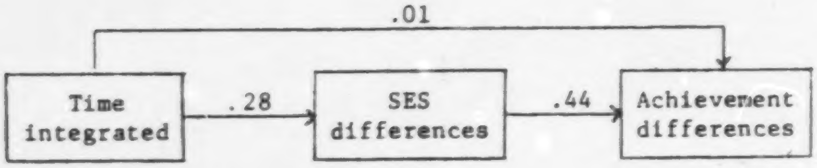
Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Achievement Differences			
SES Differences	.44		.44
Climate			
SES Differences	-.27	.08	-.19
Achievement Differences	.19		.19
Time Integrated	-.29		-.29
Teaching Style			
SES Differences	.23	.00	.23
Achievement Differences	.01		.01
Time Integrated	.01		.01
Likes More Friends of Different Race			
SES Differences	.24	.08	.32
Time Integrated	.31	.03	.34
Achievement Differences	.11	-.02	.09
Teaching Style	.05		.05
Climate	-.11		-.11

Teaching style, as depicted by the amount of time spent warning and scolding, is primarily determined by white-black SES differences. The greater the SES differences, the more time the teacher spends warning and scolding. Teaching style has a negative relationship with climate indicating that teachers who spend much of their time scolding tend to have less warm and open contacts with parents. Much of the variance in teaching style is unexplained in the present model (multiple correlation = .24) suggesting that it may be to a certain extent a personality trait that remains relatively unmodified by the characteristics of the particular environment.

The primary determinants of white racial attitude in order of importance are length-of-time integrated, white-black SES differences, climate, and achievement differences. That is, careful inspection of the relevant path coefficients leads to the following conclusions:

(1) The longer the school is integrated, the better the white racial attitude. This important relationship does not appear to be spurious since SES and achievement differences were controlled. That is, even though length-of-time integrated is related to SES and achievement differences, as discussed above, when SES and achievement are controlled, length-of-time integrated remains the largest single direct effect on white racial attitudes. It also has some indirect effect mediated by climate (see Table 5-3a). Thus, the total positive effect of length of integration (.34) on white racial attitudes is the most important contributor to white racial attitudes.

(2) The greater the white-black achievement differences, the less positive the white's racial attitude. Since results discussed earlier show that there is a relationship between white-black SES differences, length-of-time integrated, and achievement differences, an alternative submodel might be posed as follows:



The resulting path coefficients suggest that the length of time a school is integrated essentially affects achievement differences between blacks and whites only through its impact on SES composition of the school. That is, when one holds SES differences constant, the path coefficient of length-of-time integrated on achievement differences is essentially zero while the SES differences maintain their large impact on achievement differences. The apparent inability of integration to remove achievement differences, except through selective movement of various SES groups, should not be too suprising considering the comparatively short time that large-scale school integration has been operating.

(3) The more warm and open the teacher-parent contact, the better the white racial attitude. This result is even more encouraging since length of time integrated seems to lead to improvement in teacher-parent contact.

(4) Although length-of-time integrated has the largest single effect on white racial attitudes, differences between black-white SES has a relatively large total negative effect on white racial attitudes (see Table 5-3a). That is, disparate black-white SES differences in integrated schools not only have a substantial direct negative effect on white racial attitudes, but it also has significant indirect effects due to its negative impact on both parent-teacher relations and achievement differences, both of which in turn have an effect on white racial attitudes.

In summary then, a school which could be characterized by having positive white racial attitudes at the fifth grade would in all probability have (1) been integrated for a relatively longer time, (2) smaller gaps between both white-black SES and achievement, particularly SES, and (3) relatively warm and open parent-teacher contacts. The encouraging finding here is that although white fifth grade racial attitudes are related to white-black SES and achievement differences, the most important determinant, independent of SES and achievement, is length of time integrated.

Black fifth graders. Inspection of Figure 5-3b and Table 5-3b indicates that the black pattern of path coefficients is similar to the white pattern with one major exception, the relationship between time integrated and whether or not black children would like more friends of a different race. Although the zero-order correlation between length-of-time integrated and "like more friends of a different race" is practically zero ($r = .03$), the path coefficient ($b^* = -.21$) indicates a significant negative relationship. That the zero-order correlation is in effect zero, although the explanatory variable takes a large negative weight in the causal equation, is classic evidence for a suppressor effect. Although the interpretation of any suppressor effect is usually very tenuous, a tentative hypothesis will be suggested here. In general, a suppressor variable subtracts out invalid variance from other explanatory variables with which it is highly correlated. Invalid variance may be understood to mean that variance in other explanatory variables which is not correlated with the dependent variable. In this instance, the length of time the black fifth grader has been in an integrated school is highly related to black-white SES differences. That is, the longer the black fifth grader has been in integrated schools, the greater the likelihood of smaller black-white SES differences. What appears to be happening here is that the portion of the black-white SES difference which is in turn related to length-of-time integrated is apparently invalid in explaining black fifth grade racial attitudes and is thus being subtracted out, as indicated by the large negative regression coefficient for length-of-time integrated. The question here is, what part of the SES differences or, more likely, the "trappings" of SES differences which cannot be expected to disappear with length-of-time

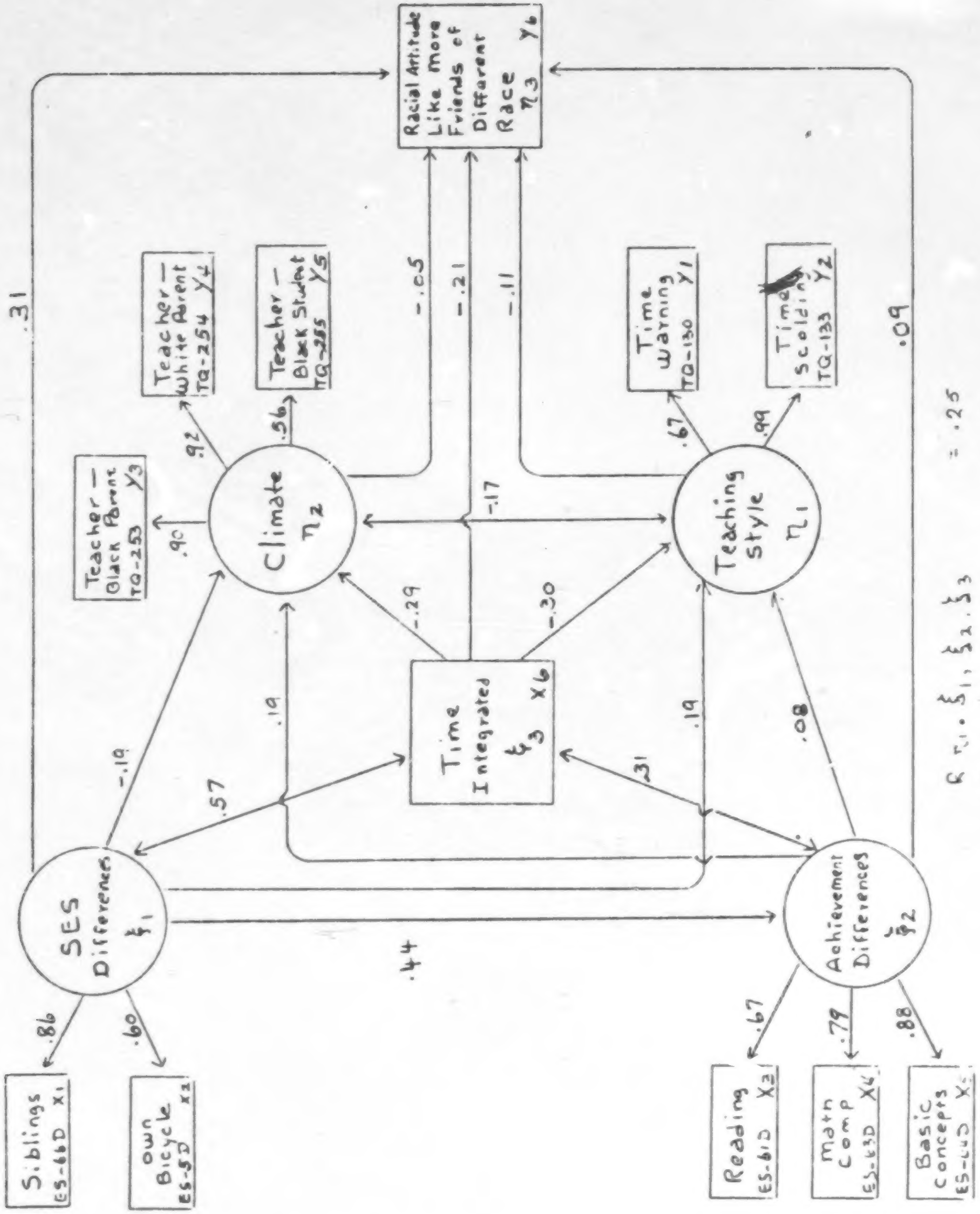

Racial Attitude Like More Friends of Different Race η3 Y6
.31
-.05
-.21
-.11
.09
Teacher — White Parent TQ-254 Y4
Teacher — Black Student TQ-255 Y5
Time Warning TQ-130 Y1
Time Scolding TQ-133 Y2
Teacher — Black Parent TQ-253 Y3
.90
.92
.56
Climate η2
-.17
.67
.99
Teaching Style η1
-.29
-.30
Time Integrated ξ3 X6
-.19
.19
.19
.57
.31
.08
SES Differences ξ1
Achievement Differences ξ2
.44
.86
.60
.67
.79
.88
Siblings ES-66D X1
Own Bicycle ES-5D X2
Reading ES-61D X3
Math Comp ES-63D X4
Basic Concepts ES-64D X5
R η1 · ξ1, ξ2, ξ3 = .25
R η2 · ξ1, ξ2, ξ3 = .39
R η3 · η1, η2, ξ1, ξ2, ξ3 = .30

Fig. 5-3b. Explanatory Model for "Would You Like More Friends of Different Race?" Black Fifth Graders

Table 5-3b

Direct and Indirect Effect for "Would You Like More Friends of Different Race?"

Black Fifth Graders

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Achievement Differences			
SES Differences	.44		.44
Climate			
SES Differences	-.19	.08	-.11
Achievement Differences	.19		.19
Time Integrated	-.29		-.29
Teaching Style			
SES Differences	.19	.04	.23
Achievement Differences	.08		.08
Time Integrated	-.30		-.30
Likes More Friends of Different Race			
SES Differences	.31	.03	.34
Time Integrated	-.21	.04	-.17
Achievement Differences	.09	-.02	.07
Teaching Style	-.11		-.11
Climate	-.05		-.05

integrated are we talking about here? It is these permanent differences in SES and their associated differences in life styles which are not "melted" out in integration and which then have a debilitating effect on black racial attitudes. It is quite possible that a significant part of what is described as black racial attitudes is simply the antagonism the "have nots" feel for the "haves." This antagonism, of course, is accentuated when SES differences are large.

With this one exception, i.e., "length-of-time integrated," the remainder of the structural relationships follows the same pattern as the white model previously discussed. That is, differences in SES and achievement have both direct and indirect effects, through parent-teacher relationships, on the black fifth graders' racial attitudes.

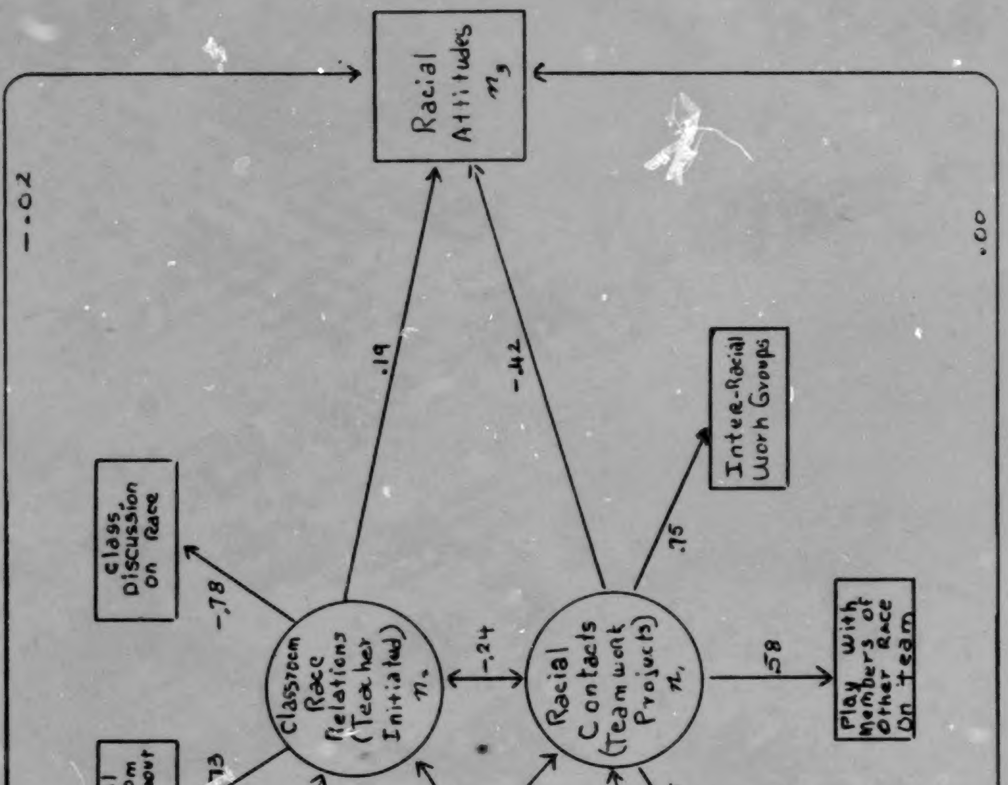
The focus on achievement differences and SES differences points up policy implications not revealed by the correlations between school conditions and outcomes presented in Chapter 3. Positive racial attitudes are directly affected by similarity of black and white students in SES, for both black and white students. For white students, achievement differences have a lesser but still evident direct effect. It has often been suggested that integration would work more smoothly if black and white students of similar background were combined in a school. One cannot support a policy of school assignment based on individual SES. However, school districts can draw desegregation plans to make the range of SES similar for black and white students. In particular, districts can avoid the practice, fairly often observed, of combining a predominantly low SES group of black students with a noticeably higher SES group of white students.

Model III. Time Integrated, Teaching Practices, and Racial Contact Practices as Determinants of Racial Attitudes in Elementary Schools

A somewhat different model incorporating length-of-time integrated is presented in Figure 5-3c and Table 5-3c. The primary outcome variable here is a racial attitude scale which includes both black and white responses, equally weighted in a given school. The objective of this particular model is to yield further information on the relative influence of length-of-time integrated as well as principal's racial attitude on such mediating and/or process variables as teacher-initiated race relations studies and teacher-initiated racial contact, which in their turn may affect student racial attitudes. This path analysis model was applied to a matrix of partial correlations where percent black, SES, and North-South geographic locations were partialed out.

It would appear that time integrated has a significant positive impact on both teacher-initiated race-relations studies and teacher-initiated racial contact. In comparison, principal's racial attitude, holding constant time integrated, has little or no effect on amount of racial contact among students and a relatively minor effect on teacher-initiated racial-relations studies.

The negative correlations between time integrated and principal's racial attitude indicate that the longer the students in the school have been integrated the better the principal's racial attitude. It should be remembered here that SES has been held constant in all these relations. It is particularly interesting to note that, holding other things constant, racial contact--as defined by working with and/or playing on a team with members of another race--is a far more important determiner of racial attitude at a given school ($b = -.42$) than are the more passive classroom racial discussions and interrace class activities that define the construct classroom race relations. It would seem that the active cooperation involved in teamwork activities is a powerful determiner of good race relations. The question may arise here about the relatively small impact the principal has on the various mediating and outcome variables. But one should remember that SES has been held constant and much of the principal's racial attitude is tied to SES differences, which in turn are nested under race.


Racial Attitudes η_3
-.02
.00
.19
-.42
Class Discussion on Race
Inter-Racial Work Groups
-.78
.75
Classroom Race Relations (Teacher Initiated) η_2
-.24
Racial Contacts (Teamwork Projects) η_1
.58
Play with Members of Other Race On team
Special Classroom Projects About Race
.73
.35
Studied About Black People
.36
.02
-.38
.19
Time Integrated ξ_1
-.16
Principal's Racial Attitude ξ_2

$R\,\eta_1 \cdot \xi_1, \xi_2 = .35$

$R\,\eta_2 \cdot \xi_1, \xi_2 = .53$

$R\,\eta_3\;\eta_1, \eta_2, \xi_1, \xi_2 = .54$

Fig. 5-3c

Fig. 5-3c. A model of effects of teaching practice on students' racial attitudes

Black and white fifth graders combined

Table 5-3c

Direct and Indirect Determinants of Fifth Grade Racial Attitudes Holding Constant SES, % Black, and North-South Geographical Location

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
Classroom Race Relations (Teacher Initiated)			
Time Integrated	-.38		-.38
Principal's Racial Attitude	.19		.19
Racial Contacts (Teamwork Projects)			
Time Integrated	.36		.36
Principal's Racial Attitude	.02		.02
Racial Attitudes			
Time Integrated	-.02	-.22	-.24
Principal's Racial Attitude	.00	.03	.03
Classroom Race Relations (Teacher-initiated)	.19		.19
Racial Contacts (Teamwork projects)	-.42		-.42

The importance of teaching methods designed to foster positive racial attitudes was emphasized in the correlational results reported in Chapter 3. The path analysis reported here suggests two hypotheses: (a) that the effect of race-relations projects and teamwork projects is direct and substantial, and (b) that the previously observed effect of length-of-time integrated is an indirect one, having a direct impact on teaching practices.

Fifth Grade Summary

The correlations reported in Chapter 3 identified teaching practices that emphasize race relations as the school characteristic most consistently related to race relations in elementary schools. The path analyses permit examination of these variables in the context of other important school characteristics.

White fifth graders' racial attitudes appear to be a function of (1) teachers' racial attitudes, (2) black-white SES and achievement differences, (3) length-of-time integrated, and (4) teaching practices that emphasize racial contact. We have hypothesized and fitted a model and subject matter where the principal's attitude is antecedent to the teachers' attitudes. A reasonable argument might well be presented for teachers' affecting principal's attitude,or what is more likely, a feedback reciprocal mechanism. It is possible that both of these latter models would provide equally good fits to the data. The fact remains, however, that the principal has, within certain limits, control over the "types" of teachers he/she wishes to retain. Thus, if we are looking for the one manipulable variable which would have an impact on white fifth graders' racial attitudes, we should look at the principal.

The longer the school has been integrated, the better the white racial attitude. This important relationship does not appear to be spurious since SES and achievement differences were controlled. That is, even though length-of-time integrated is related to black-white SES and achievement differences, when SES and achievement are controlled, time integrated has both a large direct as well as indirect effect on white racial attitudes. Thus, if SES differences are not vast, it would appear that harmonious racial attitudes may come about with the passage of time.

Although the school environment (principal and teacher attitudes) seemed to have little effect on black fifth graders' attitudes, differences between their SES and that of their white peers does have a considerable impact on their racial attitudes. The greater the disparity between black and white SES, the more negative the black racial attitude. In spite of the importance of this contextual effect, much of the variance in black fifth grade racial attitudes was unexplained by the model. Part of this unexplained variance may be due to (1) the fact that what happens in the school--that is, teacher-student interaction--is a small part of the total input to the developmental process involved in racial attitudes for black students and (2) since the models were estimated separately for the two subpopulations, no estimates were obtained concerning the reciprocal causation between the two groups. That is, racial attitudes of white fifth graders, to a certain extent, affect racial attitudes of black students, which then feed back to white students, etc. The fact remains, however, that there is a large component of white student racial attitudes which seems to be a function of teacher racial attitudes. It appears that while the school situation may have considerable impact on the racial views of white fifth graders, black fifth graders may be primarily influenced by (1) the racial attitudes of other black people, (2) the social class of their white peers, and (3) other unmeasured variables outside the school system. One thing is clear and that is that black racial attitudes are complex and appear to have a multicausal basis which is not necessarily centered in the school situation.

When the racial attitudes of white and black students are combined into an index of overall student racial attitude, the effect of teaching practices becomes especially evident. Projects requiring interracial teamwork and instruction that involves race relations have direct effects on the racial attitudes of students.

Causal Analysis of High School Data

Two different sets of structural models were constructed and analyzed for tenth grade data. The first considers SES, achievement, and the racial attitudes of teachers and principals as determinants of student racial attitudes. The second examines effects of school climate and teaching practice.

Model I. Effects of SES, Achievement, and Racial Attitudes of Teachers and Principals

Figures 5-4a and 5-4b present the structural models and their associated path coefficients, while Tables 5-4a and 5-4b present the direct and indirect effects of the hypothesized explanatory variables for the tenth grade black and white subsamples. The appendix to Chapter 5 presents a description of the items used in these structural models. Inspection of the SES factor for the two races (Figures 5-4a and 5-4b) indicates that father's occupation (X_1) is a much less reliable indicator of SES for black than for white students. Mother's education (X_2), however, is the best indicator of SES for both black and white subpopulations. The lack of relationship between father's occupation and mother's education for the black subsample is not a function of lack of variance since the two populations differ trivially with respect to variance. Some alternative explanations for this result are that some black tenth graders (1) give unreliable reports of their father's occupation,

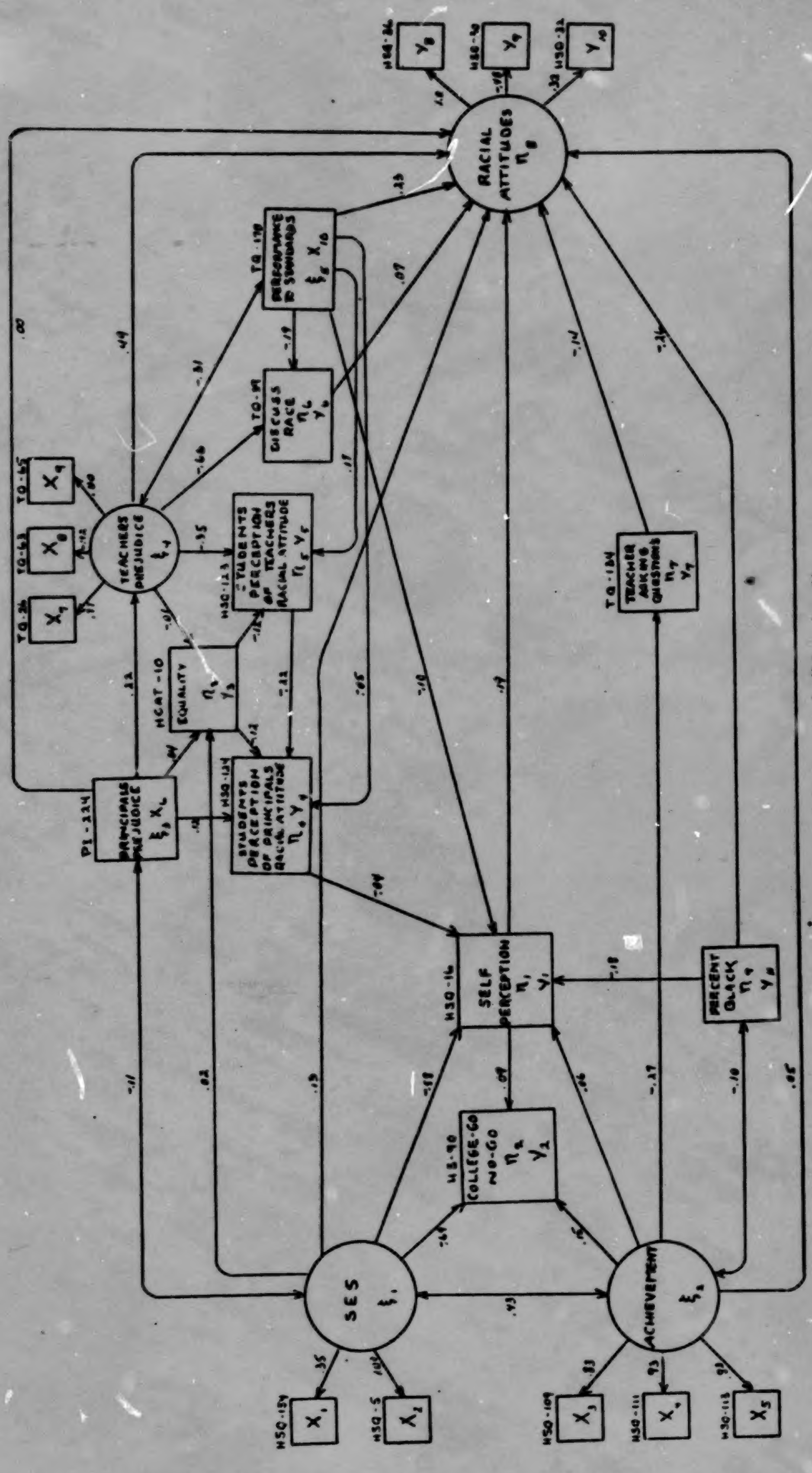

RACIAL ATTITUDES η8
HSQ-36 Y8
HSQ-30 Y9
HSQ-32 Y10
TQ-130 PERFORMANCE TO STANDARDS ξ6 X10
TQ-59 DISCUSS RACE η6 Y6
TEACHERS PREJUDICE ξ4
TQ-36 X7
TQ-63 X8
TQ-65 X9
HSQ-123 STUDENTS PERCEPTION OF TEACHERS RACIAL ATTITUDE η5 Y5
HCAT-10 EQUALITY η3 Y3
PI-224 PRINCIPALS PREJUDICE ξ3 X6
HSQ-124 STUDENTS PERCEPTION OF PRINCIPALS RACIAL ATTITUDE η4 Y4
TQ-124 TEACHER ASKING QUESTIONS η7 Y7
HSQ-16 SELF PERCEPTION η1 Y1
PERCENT BLACK η9 Y8
HS-90 COLLEGE-GO NO-GO η2 Y2
SES ξ1
ACHIEVEMENT ξ2
HSQ-134 X1
HSQ-5 X2
HSQ-109 X3
HSQ-111 X4
HSQ-118 X5
.35
1.02
.83
.93
.93
.43
.64
.15
.58
.09
.26
-.27
-.10
.05
-.18
-.04
-.11
.02
.13
.17
-.10
.05
-.14
-.36
.22
.17
.09
-.19
-.31
-.66
.55
.49
.00
.23
1.0
.32

Fig. 5-4a. Black 10th grade structural model of racial attitudes

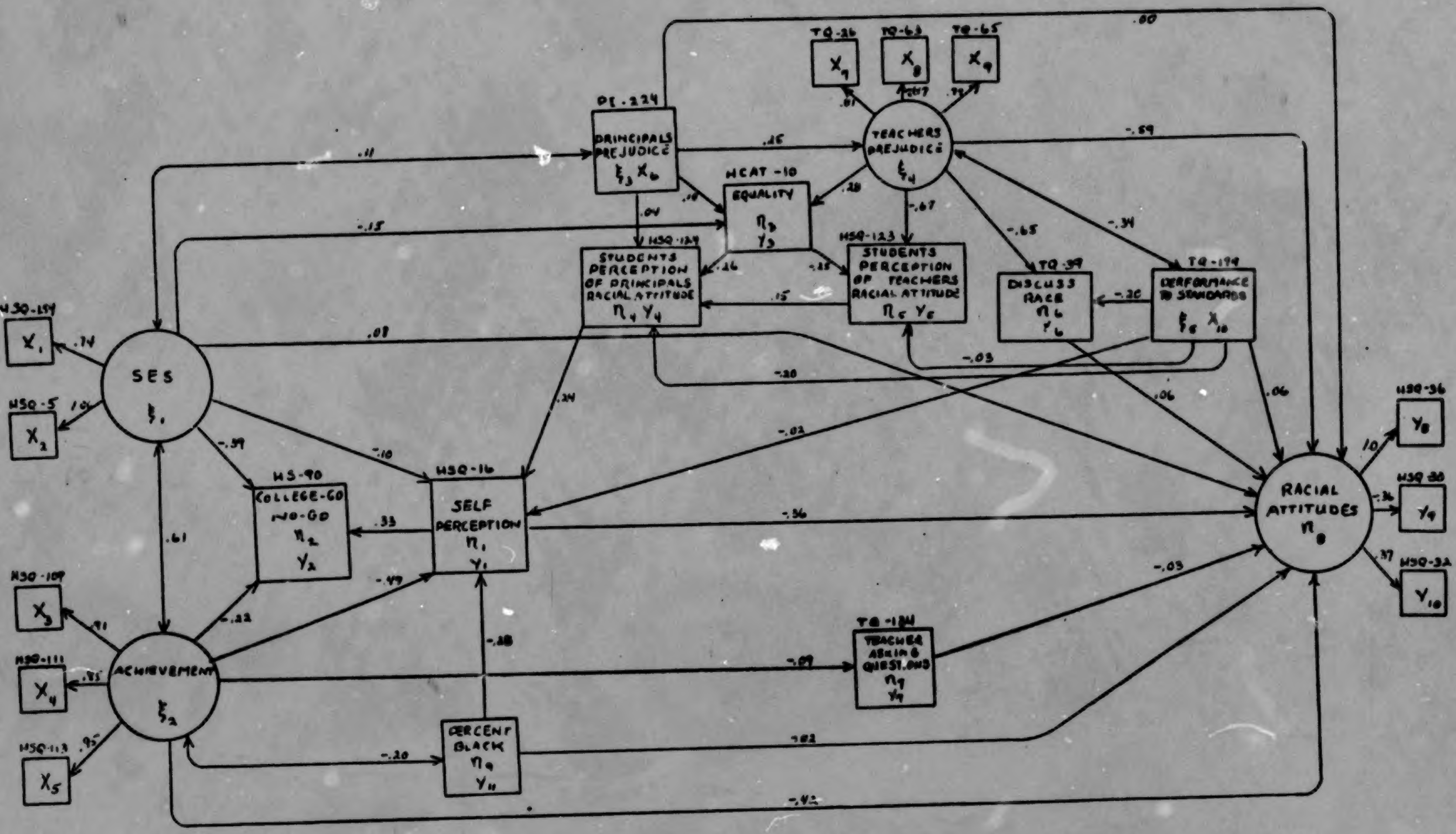

PI.224
PRINCIPALS PREJUDICE
ξ_3 X_6
TQ-26
X_7
TQ-63
X_8
TQ-65
X_9
.81
.47
.79
TEACHERS PREJUDICE
ξ_4
.00
-.59
.26
.11
HCAT-10
EQUALITY
η_3
Y_3
.18
.04
.28
-.67
-.15
HSQ-124
STUDENTS PERCEPTION OF PRINCIPALS RACIAL ATTITUDE
η_4 Y_4
.26
.25
HSQ-123
STUDENTS PERCEPTION OF TEACHERS RACIAL ATTITUDE
η_5 Y_5
.15
-.65
-.34
TQ-39
DISCUSS RACE
η_6
Y_6
-.20
TQ-174
PERFORMANCE TO STANDARDS
ξ_5 X_{10}
-.03
-.20
.08
.06
.06
.24
-.02
HSQ-174
X_1
.74
HSQ-5
X_2
1.0
SES
ξ_1
-.39
-.10
HS-90
COLLEGE-GO NO-GO
η_2
Y_2
HSQ-16
SELF PERCEPTION
η_1
Y_1
.33
-.36
.61
-.49
-.22
HSQ-109
X_3
.91
HSQ-111
X_4
.85
HSQ-113
X_5
.95
ACHIEVEMENT
ξ_2
-.18
-.09
TQ-134
TEACHER ASKING QUESTIONS
η_7
Y_7
-.03
PERCENT BLACK
η_9
Y_{11}
-.20
.02
-.42
RACIAL ATTITUDES
η_8
HSQ-36
Y_8
.10
HSQ-30
Y_9
-.36
HSQ-32
Y_{10}
.37

Fig. 5-4b. White 10th grade structural model of racial attitudes

Table 5-4a

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(Black - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Self-Perception (R = .58)		
SES	-.58	-	-.58
Achievement	.06	-	.06
Principal's Prejudice	-	-.00	-.00
Teacher's Prejudice	-	-.00	-.00
Performance to Standards	-.10	.00	-.10
Equality	-	.00	.00
Student's Perception of Principal's Racial Attitude	-.04	-	-.04
Student's Perception of Teacher's Racial Attitude	-	.01	.01
Percent Black	-.18	-	-.18
	College-Go No-Go (R = .69)		
SES	-.69	-.05	-.74
Achievement	.15	.01	.16
Principal's Prejudice	-	-.00	-.00
Teacher's Prejudice	-	-.00	-.00
Performance to Standards	-	-.01	-.01
Self-Perception	.09	-	.09
Equality	-	.00	.00
Student's Perception of Principal's Racial Attitude	-	-.00	-.00
Student's Perception of Teacher's Racial Attitude	-	.00	.00
Percent Black	-	-.02	-.02

Table 5-4a (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(Black - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Equality (R = .04)		
SES	.02	-	.02
Principal's Prejudice	.04	-.00	.04
Teacher's Prejudice	-.01	-	-.01
	Student's Perception of Principal's Racial Attitude (R = .30)		
SES	-	-.00	-.00
Principal's Prejudice	.12	.01	.13
Teacher's Prejudice	-	.08	.08
Performance to Standards	-.05	-.04	-.09
Equality	-.12	.03	-.09
Student's Perception of Teacher's Racial Attitude	-.22	-	-.22
	Student's Perception of Teacher's Racial Attitude (R = .45)		
SES	-	-.00	-.00
Principal's Prejudice	-	-.08	-.08
Teacher's Prejudice	-.35	.00	-.35
Performance to Standards	.17	-	.17
Equality	-.12	-	-.12
	Discuss Race (R = .63)		
Principal's Prejudice	-	-.15	-.15
Teacher's Prejudice	-.66	-	-.66
Performance to Standards	-.19	-	-.19

Table 5-4a (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(Black - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Teacher Asking Questions (R = .27)		
Achievement	-.27	-	-.27
	Racial Attitudes (R = .58)		
SES	-.13	-.11	-.24
Achievement	.05	.05	.10
Principal's Prejudice	.00	-.00	.00
Teacher's Prejudice	.49	-.05	.44
Performance to Standards	.23	-.03	.20
Self-Perception	.19	-	.19
Equality	-	.00	.00
Student's Perception of Principal's Racial Attitude	-	-.01	-.01
Student's Perception of Teacher's Racial Attitude	-	.00	.00
Discuss Race	.07	-	.07
Teacher Asking Questions	-.14	-	-.14
Percent Black	-.26	-.03	-.29

Table 5-4b

Direct and Indirect Effects on Dependent Variables by Hypothesized Causes

(White - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Self-Perception (R = .62)		
SES	-.10	-	-.10
Achievement	-.49	-	-.49
Principal's Prejudice	-	.01	.01
Teacher's Prejudice	-	-.01	-.01
Performance to Standards	-.02	-.05	-.07
Equality	-	.05	.05
Student's Perception of Principal's Racial Attitude	.24	-	.24
Student's Perception of Teacher's Racial Attitude	-	.04	.04
Percent Black	-.28	-	-.28
	College-Go No-Go (R = .76)		
SES	-.39	-.04	-.43
Achievement	-.22	-.16	-.38
Principal's Prejudice	-	.00	.00
Teacher's Prejudice	-	-.00	-.00
Performance to Standards	-	-.02	-.02
Self-Perception	.33	-	.33
Equality	-	.02	.02
Student's Perception of Principal's Racial Attitude	-	.08	.08
Student's Perception of Teacher's Racial Attitude	-	.01	.01
Percent Black	-	-.09	-.09

Table 5-4b (Continued)

Direct and Indirect Effects on Dependent Variables
by Hypothesized Causes

(White - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Equality (R = .34)		
SES	-.15	-	-.15
Principal's Prejudice	.10	.07	.17
Teacher's Prejudice	.28	-	.28
	Student's Perception of Principal's Racial Attitude (R = .30)		
SES	-	-.03	-.03
Principal's Prejudice	.04	.01	.05
Teacher's Prejudice	-	-.04	-.04
Performance to Standards	-.20	-.00	-.20
Equality	.26	-.04	.22
Student's Perception of Teacher's Racial Attitude	.15	-	.15
	Student's Perception of Teacher's Racial Attitude (R = .77)		
SES	-	.04	.04
Principal's Prejudice	-	-.21	-.21
Teacher's Prejudice	-.67	-.07	-.74
Performance to Standards	-.03	-	-.03
Equality	-.25	-	-.25
	Discuss Race (R = .61)		
Principal's Prejudice	-	-.16	-.16
Teacher's Prejudice	-.65	-	-.65
Performance to Standards	-.20	-	-.20

Table 5-4b (Continued)

Direct and Indirect Effects on Dependent Variables by Hypothesized Causes

(White - 10th Grade)

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
	Teacher Asking Questions (R = .09)		
Achievement	-.09	-	-.09
	Racial Attitudes (R = .73)		
SES	.08	.04	.12
Achievement	-.42	.18	-.24
Principal's Prejudice	.00	-.00	.00
Teacher's Prejudice	-.59	-.04	-.63
Performance to Standards	.06	.01	.07
Self-Perception	-.36	-	-.36
Equality	-	-.02	-.02
Student's Perception of Principal's Racial Attitude	-	-.09	-.09
Student's Perception of Teacher's Racial Attitude	-	-.01	-.01
Discuss Race	.06	-	.06
Teacher Asking Questions	-.03	-	-.03
Percent Black	-	.10	.10

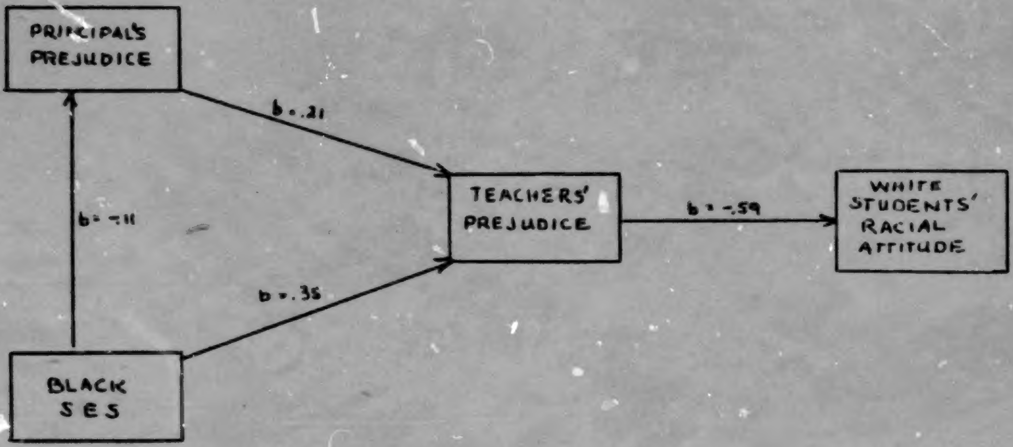
(2) have fathers whose job status is not consistent with their educational level, and/or (3) have parents whose educational-occupational levels are more likely to be divergent than those of the white subpopulation.

The indicators of achievement for the two subpopulations are all relatively reliable, yet the pattern of the loadings is slightly different. That is, for black students the "best indicator" of achievement is a test of mathematical computation, while tests on science and reading material are the best indicators of white achievement. It is possible that for some black tenth graders, performance on the mathematics test may require a certain amount of reading skill as well as some science knowledge. That is, depending on what achievement level an individual is operating at, tests with the same names may be measuring somewhat different skills. What is more interesting, however, is the considerably lower relationship between SES and achievement for black ($r = .43$) than for white students ($r = .61$), yielding additional support to the notion that SES may have a somewhat different meaning for black students. That is, SES for black students demonstrated a slightly different loading pattern (internal consistency). Inspection of its external relationship with achievement and self-perception (e.g., see Figs. 5-4a and 5-4b) indicates that these external relationships also differ both in level and pattern. Black tenth graders' SES, unlike that of white tenth graders, is highly related to their academic self-perception (y_1). That is, black students characterized by high SES, tend to perceive themselves as having "good school abilities," yet their achievement, as measured by tests, is relatively unrelated to their self-perception of their school abilities. Conversely, for white students, academic self-perception is highly related to their achievement scores and only trivially related to their socioeconomic status. Similarly to academic self-perception, whether or not black students intend to attend college is primarily determined by their SES, while for white students, SES is not quite so important. For white students, their relative achievement has a direct effect on going to college as well as a relatively large indirect effect mediated by academic self-perception. That is, the direct effect = .22 and the indirect effect of achievement on college-going for whites is (-.49) x (.33) = -.16, yielding a total hypothesized effect of (-.22) + (-.16) = -.38. It is possible that, for those black students who attend integrated schools, the higher their socioeconomic status the more likely the black tenth grader is to pursue the goals of the white middle class, in this case, planning to go to college. It would seem reasonable to expect that this assimilation by blacks of what has been white SES-related goals (e.g., going to college) may well be a by-product or at least a goal encouraged by attending desegregated schools.

Unlike the case in elementary schools, teachers' prejudice is only moderately related to principal's prejudice. Teachers' prejudice is, however, significantly related (r = .37) to SES of the black tenth graders. That is, the higher the black students' SES, the more positive the teacher racial attitude. This is similar to the fifth grade results, with the exception that tenth grade black socioeconomic status only seems to affect the teachers and not both the teacher and the principal, as in the fifth grade. It may be that the principals in the high school have a comparatively larger administrative role than the fifth grade principals, and their contact with students of either race may be minimal. There is no indication that the high school principals are any more or less racially biased than their primary school counterparts since their mean responses to the prejudice item are almost identical for the two groups of principals. It would seem that, whatever the tenth grade principal's reported racial attitude, it is not so significantly related to the SES of the black students (unlike in the fifth grade) and furthermore, that students, black or white, appear to have few ideas as to what their principal's racial attitudes are, as indicated by the small path coefficients in Figures 5-4a and 5-4b.

Similar to the case in fifth grade, tenth grade white students' perceptions of their teachers' racial attitudes are highly congruent with the teachers' reported racial attitudes. In schools in which teachers report negative racial attitudes, white students perceive teachers' attitudes as indeed being racially biased. Unlike the black fifth graders, black tenth graders do perceive teachers' attitudes as racially biased, when teachers report negative attitudes, although this relationship is considerably less strong for blacks than whites. It would appear that black and white tenth graders are much more likely to perceive the same racial cues and to respond similarly to them than are black and white fifth graders.

Inspection of the construct racial attitude in Figures 5-4a and 5-4b indicates that for both black and white tenth graders, the item concerning whether or not one would "like more friends of a different race" (y_8) is by far the most reliable indicator of racial attitudes. Consistent with the results in the fifth grade, the largest determinant of white racial attitudes is the teachers' racial attitudes. That is, teachers characterized by negative racial attitudes tend to have white students who are less likely to report that they want more friends of a different race. The blacks have just the opposite reaction. The greater the teachers' racial biases, the more likely the blacks would like to have a friend of a different race. This finding is essentially a replication of the fifth grade results. A summary of the teachers' component of white tenth grade students' racial attitudes might be diagrammed as follows:



As was found in the fifth grade, teachers' prejudice, which has a large negative impact on white tenth grade students' racial attitudes, seems to be a function of principal's prejudice and to a greater extent the socioeconomic status of the black tenth graders. Correlation between principal's racial prejudice and black SES was relatively trivial (r = -.11), as was the correlation between principal's prejudice and black achievement (r = .07). The fact, however, that black SES did have a significant positive relationship with teachers' racial attitude (b = .35), while black achievement did not (r = .01), is also an interesting difference from the fifth grade findings. More particularly, at the tenth grade it is possible that black SES rather than black achievement is the more significant component of teachers' attitudes, since behavior or discipline problems may be tied more directly to SES level. Certainly discipline problems may be more difficult to cope with at the tenth grade than at the fifth grade levels.

Consistent with the fifth grade findings is the fact that teachers with a negative racial attitude tend to feel that neither racial group, black or white, is performing to standard. That is, teachers reporting more conservative racial views tend to be more critical of academic performance in general. Also similarly to the fifth grade, the teachers reporting more positive racial attitudes tend to discuss race more frequently in class. It is interesting to note that there is a tendency for teachers to discuss race if they perceive either group as not performing to standard. This seems to reflect a willingness on the part of teachers to discuss race, irrespective of the racial attitudes of the teachers, if the two groups differ substantially on whether or not they perform to standard.

White students' self-perception of their academic abilities (y_1), holding constant their SES and tested achievement, is negatively related to their racial attitudes. That is, those white tenth graders whose reported academic self-concept is higher than warranted, either by their SES or tested ability, are less likely to want to have a friend of another race. It is possible that, for this group of individuals, the maintenance of their self-concept (academic, in this case) depends to a certain extent on the exclusion of others who are of a different race. Conversely, blacks with positive academic self-concepts tend to have positive racial attitudes.

In high schools in which white tenth graders have high achievement scores they also tend to have positive racial attitudes ($b = -.42$). Black tenth graders, however, show no relationship between achievement and racial attitudes. It would seem that, although teachers' racial attitudes have the largest single impact on white tenth graders' racial attitudes, their effect seems to be localized among the less well-achieving whites.

The greater the percentage of black students, the better the black tenth graders' racial attitudes, but for white tenth graders, the same relationship is essentially zero.

These analyses reinforce the correlational findings, reported in Chapter 4, indicating that teachers' racial attitude has a direct effect on white students' racial attitude. Moreover, both black and white students perceive the teachers' attitudes with considerable accuracy. Of the school characteristics observed here, this variable had the major impact. The analyses in the following section examine other variables that appeared important in the correlational results: teaching practices, curriculum, and school climate.

Model II. Effects of School Climate and Teaching Practice

The analysis described in this section explored a somewhat different set of process variables than the one previously reported. Specifically, it considered several aspects of school climate, teaching style, and teaching practice.

White tenth graders. Figure 5-5a and Table 5-5a present the results of the analysis for white tenth graders. This analysis was carried out on a matrix of partial correlation coefficients where the effects of SES were removed from all correlations. It is interesting to note that though the principal's racial attitude has a significant impact on the racial climate ($b^* = .45$) among teachers, his or her racial attitude (i.e., the principal's self-reported racial attitude) has little or no effect on his or her relationship with either students or teachers.

More importantly, principals who report that "black and whites are better off in mixed schools" tend to have schools whose teaching practices do encourage class discussions on race and/or have different races assigned work together. This teaching practice (encouraging class discussions on race, etc.) is by far the largest determinant of white students' racial attitudes. That is, apparently the more openness with respect to class discussions on race and/or interracial work assignments, the better the white student racial attitude. In this model there appears to be a strong suggestion that the absence or presence of harmonious interrelationships between principals and their black or white teachers also has a considerable effect ($b^* = .36$) on white students' racial attitudes. It is also gratifying to find that the presence of minority history classes has a positive

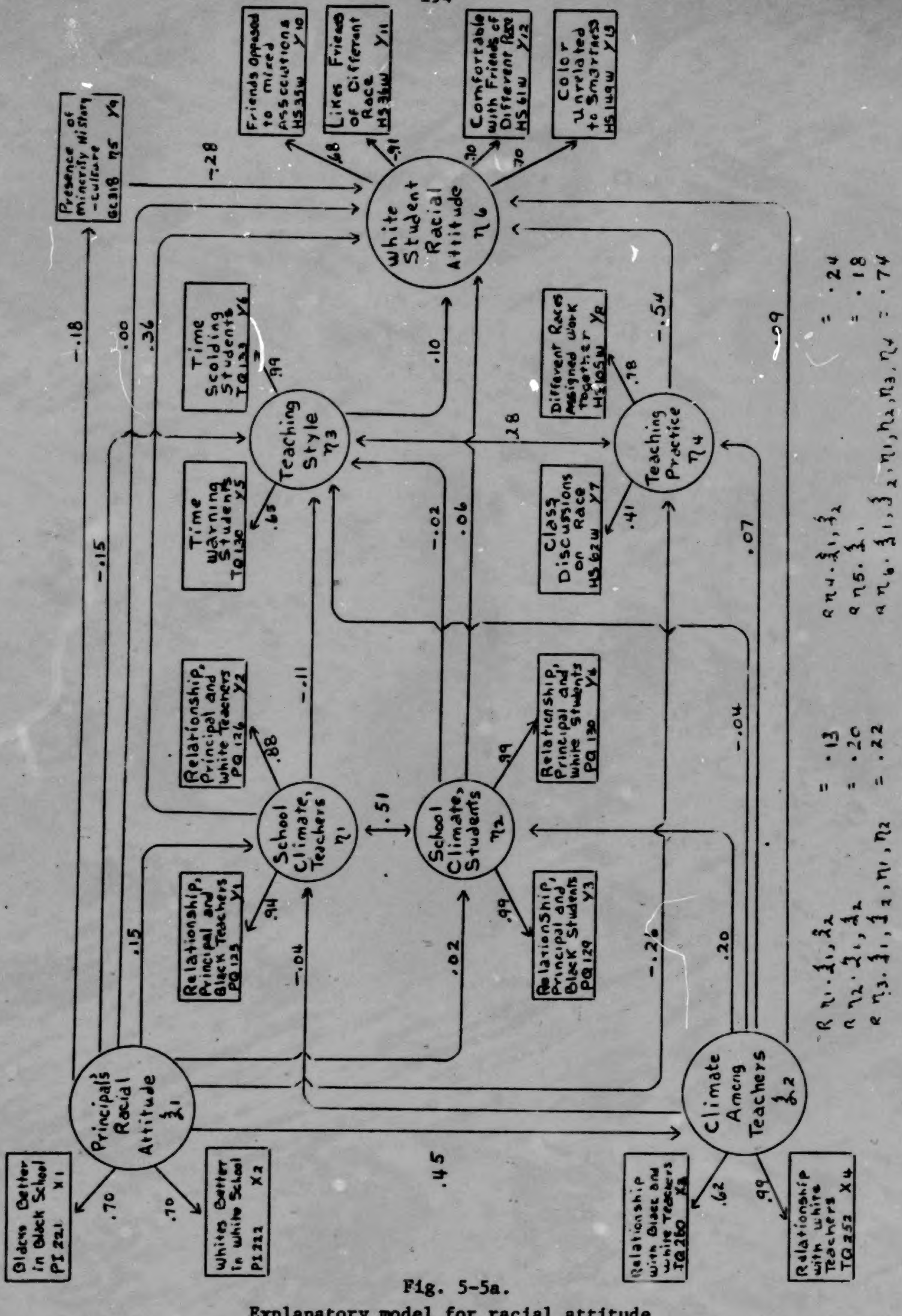

Principal's Racial Attitude ξ1
Blacks Better in Black School PI 221 X1
Whites Better in White School PI 222 X2
Climate Among Teachers ξ2
Relationship with Black and White Teachers TQ 250 X3
Relationship with White Teachers TQ 252 X4
School Climate, Teachers η1
School Climate, Students η2
Relationship, Principal and Black Teachers PQ 125 Y1
Relationship, Principal and White Teachers PQ 126 Y2
Relationship, Principal and Black Students PQ 129 Y3
Relationship, Principal and White Students PQ 130 Y4
Teaching Style η3
Time Warning Students TQ 130 Y5
Time Scolding Students TQ 133 Y6
Teaching Practice η4
Class Discussions on Race HS 62W Y7
Different Races Assigned Work Together HS 105W Y8
White Student Racial Attitude η6
Presence of Minority History -Culture GC 318 η5 Y9
Friends Opposed to mixed Associations HS 35W Y10
Likes Friends of Different Race HS 36W Y11
Comfortable with Friends of Different Race HS 61W Y12
Color Unrelated to Smartness HS 149W Y13
.70
.70
.45
.62
.99
.94
.88
.51
.99
.99
.65
.99
.41
.78
.68
.91
.30
.70
-.18
.00
.36
-.15
.15
-.04
.02
-.11
-.02
.06
.10
.28
-.54
.09
-.28
-.04
-.26
.20
.07
R η1 · ξ1, ξ2 = .13
R η2 · ξ1, ξ2 = .20
R η3 · ξ1, ξ2, η1, η2 = .22
R η4 · ξ1, ξ2 = .24
R η5 · ξ1 = .18
R η6 · ξ1, ξ2, η1, η2, η3, η4 = .74

Fig. 5-5a.

Explanatory model for racial attitude

White Tenth Graders

Table 5-5a

Direct and Indirect Effects for Racial Attitude

White Tenth Graders

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
School Climate, Teacher			
Principal's Racial Attitude	.15	-.02	.13
Climate among Teachers	-.04		-.04
School Climate, Students			
Principal's Racial Attitude	.02	.09	.11
Climate among Teachers	.20		.20
Teaching Style			
Principal's Racial Attitude	-.15	-.03	-.18
Climate among Teachers	-.04	-.00	-.04
School Climate, Teachers	-.11		-.11
School Climate, Students	-.02		-.02
Teaching Practice			
Principal's Racial Attitude	-.26	.03	-.23
Climate among Teachers	.07		.07
Minority History			
Principal's Racial Attitude	-.18		-.18

Table 5-5a (Continued)

Direct and Indirect Effect for Racial Attitude

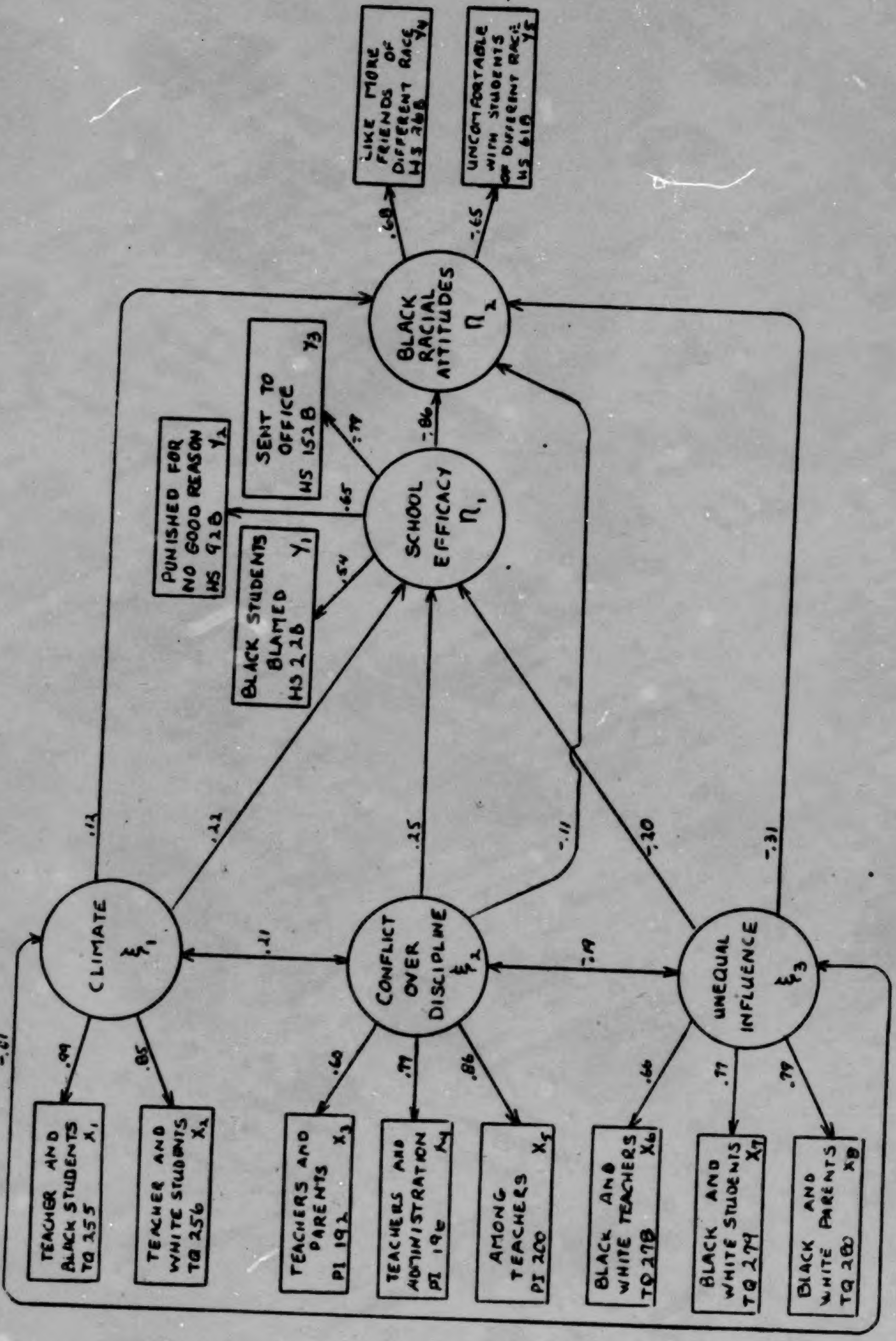
White Tenth Graders

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
White Student Racial Attitude			
Principal's **Racial Attitude**	.00	.26	.26
Climate among **Teachers**	.09	-.04	.05
School **Climate, Teachers**	.36	-.01	.35
School **Climate, Students**	.06	-.00	.06
Teaching **Style**	.10		.10
Teaching **Practice**	-.54		-.54
Minority **History**	-.28		-.28

effect on white students' racial attitudes. The absence or presence of minority history classes is also, to a certain extent, a function of the principal's racial attitude ($b^* = .18$).

As in the fifth grade analysis, it would seem that the principal's attitude is quite important in maintaining good student racial attitudes. It (principal's attitude) has a quite large total indirect effect on white students' racial attitudes. That is, principal's racial attitudes primarily affect white students through their impact on teaching practices and, to a lesser extent, their impact on (1) school climate, (2) teaching style, and (3) presence or absence of minority culture classes. All of the above behaviors in turn have significant effects on the white students' racial attitudes. The correlational outcomes reported in Chapter 4 indicate that all of these variables are related to white students' racial attitudes. The path analysis suggests that the impact of the principals' racial attitudes is an indirect one, influencing attitude through its influence on teaching and school climate.

Black tenth graders. Figure 5-5b and Table 5-5b present a structural model for black tenth graders. Since the earlier results suggest that using the same model for both black and white students often leaves much of the variance in black racial attitudes unexplained, a different structural model was posed for the black students. Inspection of Figure 5-5b indicates that student-teacher climate, conflict over discipline, and inequality of influence are all considered prior to school efficacy, which in turn is considered prior to black racial attitudes. As in the white model, SES was partialed out of the variables. Inspection of the path coefficients indicates that black racial attitudes are almost entirely determined by school fairness ($b^* = -.86$). The one exception to this is the significant path coefficient from unequal influence to black racial attitudes ($b^* = -.31$). The negative path coefficient from school fairness to black racial attitudes means that the more frequently a black student is "punished for


CLIMATE ξ1
CONFLICT OVER DISCIPLINE ξ2
UNEQUAL INFLUENCE ξ3
SCHOOL EFFICACY η1
BLACK RACIAL ATTITUDES η2
TEACHER AND BLACK STUDENTS TQ 255 X1
TEACHER AND WHITE STUDENTS TQ 256 X2
TEACHERS AND PARENTS PI 192 X3
TEACHERS AND ADMINISTRATION PI 196 X4
AMONG TEACHERS PI 200 X5
BLACK AND WHITE TEACHERS TQ 278 X6
BLACK AND WHITE STUDENTS TQ 279 X7
BLACK AND WHITE PARENTS TQ 280 X8
BLACK STUDENTS BLAMED HS 22B Y1
PUNISHED FOR NO GOOD REASON HS 92B Y2
SENT TO OFFICE HS 152B Y3
LIKE MORE FRIENDS OF DIFFERENT RACE HS 26B Y4
UNCOMFORTABLE WITH STUDENTS OF DIFFERENT RACE HS 61B Y5
.99
.85
.60
.77
.86
.66
.77
.79
-.21
.21
-.19
.13
.22
.25
-.11
-.20
-.31
.54
.65
-.79
-.86
.68
-.65

$R\eta_1 \cdot \xi_1, \xi_2, \xi_3 = .44$

$R\eta_2 \cdot \xi_1, \xi_2, \xi_3, \eta_1 = .55$

Fig. 5-5b. Explanatory model for racial attitude

Black tenth graders

Table 5-5b

Direct and Indirect Effects of Racial Attitude

Black Tenth Graders

Causes	Direct Effects	Total Indirect Effects	Total Hypothesized Effects
School Efficacy			
Climate	.22		.22
Conflict over Discipline	.25		.25
Unequal Influence	-.20		-.20
Black Racial Attitude			
Climate	.12	-.19	-.07
Conflict over Discipline	-.11	-.22	-.33
Unequal Incluence	-.31	.17	-.14
School Efficacy	-.86		-.86

no good reason," etc., the more negative his racial attitude. It is possible that a number of these punishable infractions have to do with interracial disputes; hence, the very large path coefficient.

What is more interesting, however, is the effect of inequality of influence on both school fairness and black racial attitude. The negative path coefficient from inequality of influence to school efficacy indicates that some black students are more likely to perceive themselves as being unfairly treated in just those situations where the teacher is apt to also feel that blacks and whites indeed do have unequal status. However, holding school fairness constant, those schools where the teachers report giving unequal influence to blacks and whites also tend to have more negative black racial attitudes.

The negative correlation (r = -.19) between unequal influence being accorded blacks and whites and conflict over discipline suggests that there is a slight tendency for those schools which report applying the same standards to blacks and whites to also have somewhat less administrative conflict over discipline.

Teacher-student climate and conflict over discipline are positively correlated, indicating that schools which tend to report harmonious teacher-student relationships also have less teacher-parent, teacher-administration, and/or inter-teacher conflict over the administration of discipline. Both good teacher-student relationships and lack of conflict over discipline have significant positive effects on school efficacy but little or no direct effect on black racial attitudes.

Whatever the paradoxes of the above results, it is clear that black students' self-perception of whether they have been wrongfully and/or too frequently punished is highly related to their racial attitudes. This relationship probably stems from two sources. First, the source of punishment in the school situation is more likely to be a member of the white race, whether a teacher or administrator, and secondly, at least some of the disciplinary actions may result from interracial disputes among the students. In short, punishment for actions taken against members of the opposite race for slights, whether real or imagined, may simply reinforce the attitudes which lead to the original punishable behavior.

Summary

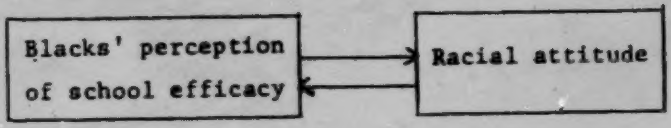
In the models portrayed in Figures 5-2 and 5-4, on the whole, there are more similarities than differences between the fifth grade and tenth grade analysis. For both grade levels, the one single variable which seems to have the largest impact on students' racial attitudes is teachers' racial attitudes. At the fifth grade, the teachers' racial attitude is significantly related to principal's racial attitude, and the SES and achievement of the black students. In the tenth grade, teachers' racial attitude is somewhat related to principal's racial attitude, but more strongly related to the black students' SES. It is more interesting to note that in the tenth grade (unlike the fifth grade) black achievement is not related to teachers' racial attitude. This "centering" of teachers' attitude on just black SES rather than achievement and SES could result from what is commonly known as SES "carriers." That is, the incorporations by tenth grade black students of SES-related variables such as middle class values and their resulting behaviors seem to be more important in determining the attitudes of the teachers toward blacks than their achievement. In particular, behavior and discipline problems, which may be SES-related, could assume far greater importance at the tenth grade than the fifth grade. The tenth grade results, however, do provide some encouraging data with respect to some of the popularly held views concerning integration. For example, in the case of the so-called "tipping point," it was found that the greater the percentage of blacks the more positive the black students' racial attitude.

Similarly, the greater the percentage of blacks in the school, the more positive the black students' academic self-concept. White academic self-concept also becomes more positive as the percentage of blacks increases.

Although the relative level of integration (% black) has either no impact on racial attitude (whites) or a positive impact (blacks), the method of integration appears to affect the teachers' racial attitude, which in turn affects the white students' racial attitude. That is, for the case of fifth graders, if the black students are low SES and low achieving, the principals and teachers tend to have negative racial attitudes and, as a result of these negative racial attitudes, influence the white students negatively. However, achievement level of the black students seems to have comparatively little direct influence on the white students' racial attitudes per se (e.g., the path coefficient associated with black performance to standards and white racial attitudes = .16) but works primarily through the principals and teachers. At the tenth grade these relationships for the most part are replicated, except that black SES, and not achievement, is the primary determinant of teachers' racial attitude. Tenth grade black achievement has not only a comparatively minor influence on the tenth grade teachers' racial attitudes, but it also has a negligible direct effect on white students' racial attitudes. The structural models diagramed in Figure 5-5 offer further insight into racial attitudes of high school students. Although it would seem likely that an individual's racial attitude would have stabilized by the time he or she reaches the tenth grade, there is some evidence, particularly for white students, that certain school practices have a significant positive impact on their racial attitudes. It has also been shown that these positive school practices tend to be implemented at those schools where the principals and teachers have positive racial attitudes. These teachers and school practices include openness of class discussions with respect to race, assignment of black and white students to work together on the same task, and the inclusion of black minority history classes in the curriculum.

It would appear that the causal model for white tenth grade racial attitudes is reasonably similar to that of the white fifth graders. That is, for white tenth graders there is considerable evidence to suggest that the causal chain from principal to teacher to student prevails at the tenth grade as well as at the fifth grade level.

As in the fifth grade, many of the determinants of the racial attitude of black tenth graders are yet to be identified. The fact that school efficacy (as perceived by black students) is highly related to black tenth graders' racial attitudes appears to be more the result of an interactional hypothesis than a one-way cause. That is, the model appears to be:



What is needed to arrive at a mathematical solution to the above model is to find a set of variables which are related to school efficacy but not to racial attitudes and conversely another separate set of variables which is related to racial attitudes but not school efficacy. Unfortunately, such a set was not found, so the feedback loop remains only a hypothesis.

Discussion

The analyses presented in this chapter were an exploratory effort to examine causal connections among variables that operate in school integration. Questions of cause and effect in the integration process are of great theoretical and practical importance. They are too complex to be answered in any final way in this study. Limits on one's ability to answer causal questions are imposed by the correlational nature of the data, by the intricacy of the variables and relationships to be studied, by the severe difficulty of constructing theoretical models that are adequate to the domain, and by the necessarily limited sampling and measurement possible in a single study. In view of these limits, the approach taken was to study a few patterns of causal relationship in some detail, and to formulate hypotheses for more direct study. This discussion section summarizes conclusions that seem to have promise for future theoretical development and empirical study.

The racial attitudes of the black and white students in a school appear to be determined in systematically different ways. It was apparent in the analyses reported in Chapters 3 and 4 that school conditions are related in different ways to the racial attitudes of black and white students. This chapter indicates that those attitudes--measured at the school-mean level--are determined by different causal chains. Moreover, this study was much more successful at explaining the attitudes of white students than those of black students.

For elementary school students, the difference between white and black students' attitudes is shown initially by the finding that components of racial attitudes are structured differently. For white students, three items cluster together to measure a construct: desiring more friends of a different race, believing that race has nothing to do with smartness, and not being afraid of teachers of a different race. For black students, these items are not sufficiently interrelated to define a single construct.

The racial attitudes of teachers have a strong direct effect on those of white students. When teachers' racial attitudes in a school are favorable, so are those of white students. For black students, the effect is smaller and in the opposite direction. A partial explanation of the difference is that black students do not perceive teachers' racial attitudes as accurately as white students. It would appear that black and white students respond to different cues in the behavior of teachers. Improvement of teachers' racial attitudes may be expected to have a direct effect on those of white students, but unclear effects on those of black students.

Amount of time integrated has a positive effect on white students' racial attitudes, but a negative effect--whose mechanism is unclear--on those of black students. Teaching style has a positive effect on white students' racial attitudes (absence of scolding and warning leads to favorable attitudes). For both black and white students, racial attitudes are more positive when overall performance level is described by teachers as "up to standard," and when mean differences in socioeconomic background between black and white students are small.

Principals' racial attitudes have an indirect effect on the racial attitudes of white students. Principals' racial attitudes have a direct effect on the attitudes of teachers, which in turn influence the attitudes of students.

At the high school level, as at the elementary school level, teachers' racial attitudes have a strong direct effect on those of white students, but a negative effect on those of black students. The self-expressed attitudes of teachers are perceived with considerable accuracy by white students. They are perceived with less accuracy by black students. Teaching practices that emphasize race relations and the teaching of minority history have direct effects on white students' attitudes. As at the elementary school level, the racial attitudes of principals seem to have an indirect effect on the racial attitudes of white students. The effect at high schools is most clearly exerted by way of an effect on teaching practices.

The racial attitudes of black high school students are affected by their reports of efficacy. This variable reflects both their perceptions of the fairness of the school to them and their personal feelings about school practices. Efficacy is affected by a positive social climate, by absence of conflict over discipline, and by equality of influence of black and white teachers, students, and parents.

In the effort to explain racial attitudes of black students, a variable that appears to have a direct effect at both the elementary and high school levels is self-perception. When black students in a school have more positive feelings about themselves, they tend to have less positive racial attitudes. This is another indication that for black students, the indicators that we have called "positive racial attitude" reflect different attitudes than for white students. Desiring more friends of a different race, feeling comfortable with students of a different race, and seeking contact with students of a different race may indicate lack of self-confidence and racial self-satisfaction, as well as positive attitudes toward the other race. In efforts to define desirable educational outcomes for black students, "positive racial attitudes" must receive much more detailed analysis and specification.

In the design of school programs, it is necessary to consider whether a school characteristic that is correlated with an outcome is in fact a cause of the outcome. With regard to white students' racial attitudes, the analyses in this chapter support the hypothesis that school conditions have direct effects on student outcomes. Causal analysis, at both a theoretical and empirical level, must remain tentative. It is not surprising that different outcomes for different races have different and complex patterns of causation. These analyses, however, encourage further investigations of school conditions as causes of educational outcomes. They give general support to the strategy of improving school conditions as a means for improving race relations.

APPENDIX TO CHAPTER 5

Variable Identification Fig. 5-2a

Student Questionnaire

X_1	ES66	Number of children in the family (1-9)
X_2	ES5	Do you own a bicycle (1*-2)
X_3	ES63	Number correct: Subtest on Math Computation
X_4	ES61	Number correct: Subtest on Reading
X_5	ES64	Number correct: Subtest on Basic Concepts
Y_1	ES46	Can you do things as well as most (1*-2)
Y_2	ES58	Do you think you will go to college (1*-2)
Y_4	ES70	Do you think your principal likes black and white students going to school together (1*-3)
Y_5	ES69	Do you think your teacher likes black and white students going to school together (1*-3)
Y_8	ES25	Would you like more friends of a different race (1*-2)

Principal Interview

X_6	PI224	Amount of prejudice is exaggerated (1-4*)

Teacher Questionnaire

X_7	TQ62	Amount of prejudice is exaggerated (1-4*)
X_8	TQ63	Like to live in an integrated neighborhood (1*-4)
X_9	TQ65	Blacks and whites should not intermarry (1-4*)
X_{10}	TQ179	Proportion of black students performing at grade level
Y_3	TQ177	Proportion of black students that are discipline problems (1*-4)
Y_6	TQ39	How often do you have class discussion about race (1*-4)
Y_7	TQ134	How often do you ask questions (1*-5)
Y_9		Percent black

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-2b

Student Questionnaire

X_1	ES66	Number of children in the family (1-9)
X_2	ES5	Do you own a bicycle (1*-2)
X_3	ES32	Does your family own their home (1*-2)
X_4	ES63	Like to live in an integrated neighborhood (1*-4)
X_5	ES61	Number correct: Subtest on Reading
X_6	ES64	Number correct: Subtest on Basic Concepts
Y_1	ES44	Are you satisfied with yourself (1*-2)
Y_2	ES46	Can you do things as well as most (1*-2)
Y_3	ES7	Are you better or worse than most at school work (1*-3)
Y_4	ES58	Do you think you will go to college (1*-2)
Y_6	ES70	Do you think your principal likes black and white students going to school together (1*-3)
Y_7	ES69	Do you think your teacher likes black and white students going to school together (1*-3)
Y_{10}	ES25	Would you like more friends of a different race (1*-2)
Y_{11}	ES29	Are you afraid of most teachers of a different race (1-2*)
Y_{12}	ES73	Color has nothing to do with smartness (1-2*)

Principal Interview

X_7	PI224	Amount of prejudice is exaggerated (1-4*)

Teacher Questionnaire

X_8	TQ62	Amount of prejudice is exaggerated (1-4*)
X_9	TQ63	Like to live in an integrated neighborhood (1*-4)
X_{10}	TQ65	Blacks and whites should not intermarry (1-4*)
X_{11}	TQ178	Proportion of white students performing at grade level (1*-4)
Y_5	TQ176	Proportion of white students that are discipline problems (1*-4)
Y_8	TQ39	How often do you have class discussion about race (1*-4)

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-2b (Continued)

Teacher Questionnaire - Continued

Y_9	TQ134	How often do you ask questions (1*-5)
Y_{13}		Percent black

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-3a and 5-3b

	Student	
X_1	ES66D	Siblings (1-9*)
X_2	ES5D	Own bicycle (1*-2)
X_3	ES61D	Reading (# right)
X_4	ES63D	Math computation (# right)
Y_5	ES25	Would like more friends of a different race (1*-2)
	Teacher	
Y_1	TQ130	Time spent warning students (1-5*)
Y_2	TQ133	Time spent scolding students (1-5*)
Y_3	TQ253	Relationship with black parents (1-9*)
Y_4	TQ254	Relationship with white parents (1-9*)
Y_5	TQ255	Relationship with black students (1-9*)

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-4a and 5-4b

Student Questionnaire

X_1	HSQ154	Father's occupation (7-75*)
X_2	HSQ5	Mother's education (1-5*)
X_3	HSQ109	Reading (number correct)
X_4	HSQ111	Mathematics (number correct)
X_5	HSQ113	Science (number correct)
Y_1	HSQ16	How do you rate yourself in school compared with those in your class (1*-5)
Y_2	HS90	Do you think you will go to college (1*-2)
Y_3	HCAT10	How likely is it that students of both races will participate in certain school activities (1-3*)
Y_4	HSQ124	Do you think your principal likes blacks and whites going to the same school (1*-3)
Y_5	HSQ123	Do you think most of your teachers like blacks and whites going to the same school (1*-3)
Y_8	HSQ36	Would friends think badly of you if you went some place after school with a student of a different race (1-2*)
Y_9	HSQ30	Are the three students you talk to most often of the same race (1-2*)
Y_{10}	HSQ32	Have you helped students of a different race with school work this year (1*-2)

Principal Interview

X_6	PI224	The amount of prejudice against minority groups is highly exaggerated (1-4*)

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-4a and 5-4b (Continued)

Teacher Questionnaire

X_7	TQ26	Will students be better off in a school of their own race, or in a racially mixed school (1-2*)
X_8	TQ63	Would like to live in an integrated neighborhood (1*-4)
X_9	TQ65	Blacks and whites should not intermarry (1-4*)
X_{10}	TQ178	What proportion of students are performing at grade level (1*-4)
Y_6	TQ39	How often do you have class discussions about race (1*-4)
Y[illegible]	TQ134	How often during the time you are teaching do you ask questions (1*-5)

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-5a

Principal Interview

X_1	PI221	Black students are better off in black schools (1)
X_2	PI222	White students are better off in white schools (1)

Teacher Questionnaire

X_3	TQ260	Your relationship with black and white teachers (1-9*)
X_4	TQ252	The relationship between you and the white teachers (1-9*)
Y_5	TQ130	Time spent warning students (1-5*)
Y_6	TQ133	Time spent scolding students (1-5*)

Principal Questionnaire

Y_1	PQ125	The relationship between you and the black teachers (1-9*)
Y_2	PQ126	The relationship between you and the white teachers (1-9*)
Y_3	PQ129	The relationship between you and the black students (1-9*)
Y_4	PQ130	The relationship between you and the white students (1-9*)

Student Questionnaire

Y_7	HS62W	There are class discussions on race (1*-4)
Y_8	HS105W	There are assignments to work with someone of another race (1*-5)
Y_{10}	HS35W	Do your friends think badly of association with those of another race (1=yes)
Y_{11}	HS36W	Would you like more friends of a different race (1=yes)
Y_{12}	HS61W	Are you comfortable with friends of a different race (1*-4)
Y_{13}	HS149W	Is color related to smartness (1-2*)

Counselor Questionnaire

Y_9	GC318	Presence (1) or absence (2) of minority history/culture

*Indicates positive end of scale

APPENDIX TO CHAPTER 5

Variable Identification. Fig. 5-5b

Teacher Questionnaire

X_1	TQ255	Your relationship with black parents (1-9*)
X_2	TQ256	Your relationship with white students (1-9*)
X_6	TQ278	Unequal influence between black and white teachers (1*-9)
X_7	TQ279	Unequal influence between black and white students (1*-9)
X_8	TQ280	Unequal influence between black and white parents (1*-9)

Principal Interview

X_3	PI192	Conflict over discipline between teachers and parents (1-7*)
X_4	PI196	Conflict over discipline between teachers and administration (1-7*)
X_5	PI200	Conflict over discipline among teachers (1-7*)

Student Questionnaire

Y_1	HS22B	Black students blamed (1=yes, 2=no)
Y_2	HS92B	Black students punished for no good reason (1-2*)
Y_3	HS152B	Black students sent to office (1*-3)
Y_4	HS36B	Would you like more friends of a different race (1=yes)
Y_5	HS61B	Are you more comfortable with friends of a different race (1*-4)

*Indicates positive end of scale

Chapter 6

Comparisons of Outcomes Across Years

The survey conducted in 1974 included 48 elementary schools and 48 high schools that had been a part of the sample for the Southern Schools study. Therefore, on these 96 schools there were data available from 1972 as well as from 1974. Twenty-two elementary schools and twenty-one high schools were resurveyed in 1975. Comparisons between 1972 results and 1974 results and between 1974 and 1975 results are the focus of this chapter.

Comparisons of Outcomes in 1972 and 1974

There are several separate dimensions for making comparisons between 1972 and 1974 results. Each addresses a different set of policy questions and poses different interpretative tasks.

1. Overall comparisons of achievement and race relations. How does the level of achievement compare over the two-year period across all elementary and all secondary schools? How do race relations compare over the two-year period? Is there a general trend toward improvement or toward decline in these educational outcomes?

2. Stability. Is there a pattern of consistency in results for given schools over the two-year period? A possible kind of consistency would be indicated by positive correlations across schools: Schools strong in an area in a given year would tend to be strong in the same area two years later. This result would be expected if factors that influence educational outcomes for schools remain constant over the time period, or if the changes that occur

affect all schools in the same way. For example, if student composition, staffing pattern, and instructional practices remained about the same for all schools over the period, or if changes in these factors affected all schools equally, high correlations between outcomes across years would be expected. On the other hand, different kinds of consistency would lead to different expectations. If the tendency were for weak schools to improve while strong schools stay strong, the expected pattern would be an elevation of the overall mean, a decrease in the overall variance, and little or no correlation across years for a given outcome.

3. School effects across time. Are there school conditions measured at time 1 that forecast student outcomes at time 2? A positive answer to this question would be indicated if there are school process conditions measured in 1972 that are significantly related to student outcome in 1974. There are often efforts to improve school programs that are intended to have either a long-range effect that may not be apparent immediately (e.g., a new curriculum that has to go through a tryout period) or a continuing effect (e.g., a significant staff change). In these cases, policy questions center on the relationship between student outcomes and school characteristics other than student outcomes measured at an earlier period of time.

Overall Comparisons

Outcome measures were developed from the 1972 Southern Schools data base analogous to those developed for the 1974 data base. Tables 6-1 and 6-2 present overall comparisons on outcome measures for elementary and high schools respectively. The means and standard deviations in these tables are school-level statistics. The outcome variables are measured by the same items

Table 6-1

Fifth Grade

Comparison of Race Relations and Achievement Outcomes in 1972 and 1974 in 48 Southern Schools

	N[1]	1972 Mean (SD)	1974 Mean (SD)	Change	t
Perceived School Racial Attitude[2]					
Black Students	46	.58	.66	+.08	1.33
		(.37)	(.35)		
White Students	47	.72	.79	+.07	1.17
		(.27)	(.30)		
Student Racial Attitude[2]					
Black Students	46	.96	1.08	+.12	2.00*
		(.30)	(.33)		
White Students	47	.66	1.06	+.40	5.71**
		(.41)	(.30)		
Achievement Sum[3]					
Black Students	47	27.55	27.59	+.04	0.05
		(4.00)	(5.26)		
White Students	47	39.51	37.99	-1.52	-2.41*
		(3.97)	(4.44)		

[1] Attrition due to low student N's within schools

[2] Scale ranges from +2 (positive end) to -2 (negative end)

[3] Possible score range is 0 to 57 (Number of correct items)

* $p < .05$ ** $p < .01$

Table 6-2

Tenth Grade

Comparison of Race Relations and Achievement Outcomes in 1972 and 1974 in 48 Southern Schools

	N[1]	1972 Mean (SD)	1974 Mean (SD)	Change	t
Perceived School Racial Attitude[2]					
Black Students	44	.07 (.38)	.08 (.39)	+.01	0.13
White Students	47	.12 (.41)	.21 (.46)	+.09	1.41
Student Racial Attitude[2]					
Black Students	44	.95 (.29)	.97 (.36)	+.02	0.31
White Students	47	.10 (.54)	.37 (.33)	+.27	3.46**
Racial Contact[2]					
Black Students	44	.07 (.45)	.10 (.52)	+.03	0.36
White Students	47	-.71 (.49)	-.47 (.44)	+.24	3.81**
School Fairness[2]					
Black Students	44	.18 (.41)	.13 (.41)	-.05	-.55
White Students	47	.57 (.35)	.47 (.38)	-.10	-1.49
Achievement Sum[3]					
Black Students	46	23.62 (3.86)	22.88 (5.91)	-.74	-0.77
White Students	48	35.74 (4.25)	34.59 (5.12)	-1.15	-1.37

[1] Attrition due to low student N's within schools

[2] Scale ranges from +2 (positive end) to -2 (negative end)

[3] Possible score range is 0 to 57 (number of correct items)

* $p < .05$ ** $p < .01$

and scoring procedure for the two years.

As Table 6-1 reveals, school means for racial attitudes of white fifth grade students improved significantly over the two-year period. The change was especially pronounced for white students. Their 1972 mean was substantially lower than that of black students. In 1974 it had increased until it was nearly equal to that of the black students, and the mean for black students was itself improving significantly. School mean achievement scores of white students decreased by 1.52 points, a small but statistically significant decrease.

Neither the higher scores in racial attitudes nor the lower scores in white student achievement in 1974 as compared to 1972 can be attributed to desegregation, since there is no control group of segregated schools. Declining achievement test scores have been observed in many recent studies under a wide range of school conditions. For example, Harnischfeger and Wiley concluded from a 1975 review of research that "for the past decade, nearly all reported test data show declines from grade 5 onwards" (p. 69). Bracken presented detailed results from statewide testing studies. He concluded that achievement is apparently falling throughout the country, and that the phenomenon is not limited to communities where there has been turmoil surrounding education in the past few years.

There are no national statistics to determine whether the improvements in attitudes of white students observed in the present study are paralleled by similar trends in the nation. From an educational viewpoint, the most profitable focus would appear to be on particular school conditions that are associated with favorable educational outcomes. This is the focus of the analyses presented in Chapters 3 and 4 of this report.

High school results (Table 6-2) also show a significant improvement in the racial attitudes of white students. The racial attitudes of black students were already high in 1972 and improved slightly but not significantly in 1974. Similarly, the interracial contact reported by white students increased significantly, while that for black students remained about the same. Finally, there was a significant improvement in the school's racial attitude as perceived by white students.

Since the 1972 and 1974 samples are of different student groups, it is possible that the differences in outcomes are a result of changes in school population. There was no significant difference across schools in racial composition or in measured SES. It is possible, however, that white students with negative racial attitudes were more likely to have left the school districts than those with positive attitudes. It is also possible that families of higher achieving students have differentially left the school district. Data were unavailable to test either hypothesis.

Figure 6-1 is a scatterplot of 1972 versus 1974 measures of white students' racial attitude in 47 elementary schools. The figure reveals several additional aspects of the attitude changes. Lines have been drawn at .66 on both dimensions, representing the mean value for all schools in 1972. In 1972, 26 schools, or 55 percent, had school means below this overall average. In 1974, only three schools, or 6.4 percent, had school means below the overall average for 1972. Twenty-three of the twenty-six schools that fell below .66 in 1972 had scores above that level in 1974.

Figure 6-1 also suggests a tendency for weak schools to improve. Strong schools remained strong relative to the 1972 mean, but did not retain superiority as compared to weaker schools. This tendency is shown more clearly in figure 6-2, which plots gain against initial 1972 performance on the same variable. The

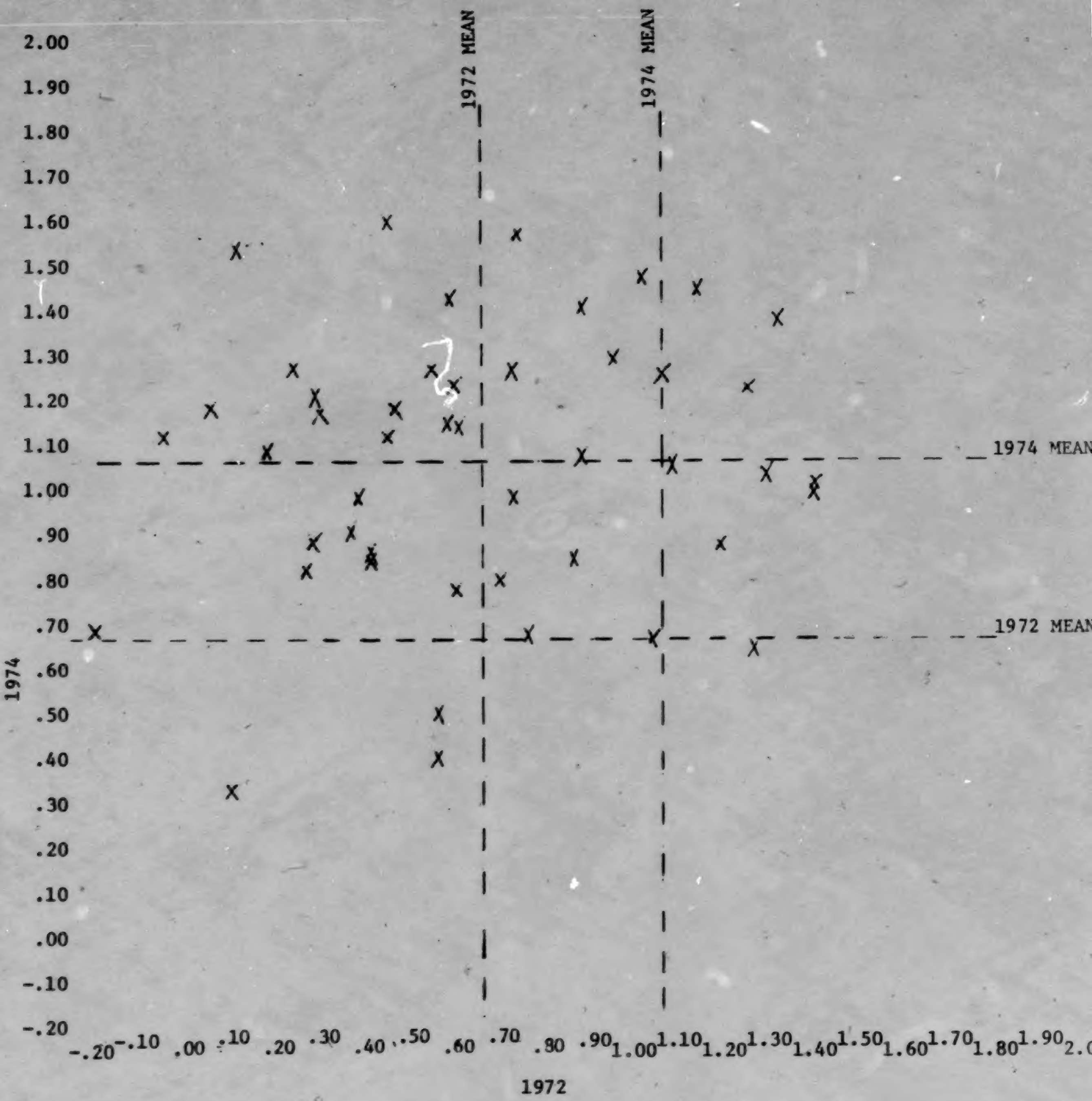


Fig. 6-1. Plot of the 1972-by-1974 school scores for fifth grade white students' personal racial attitudes. (Southern subsample, N = 47 schools)

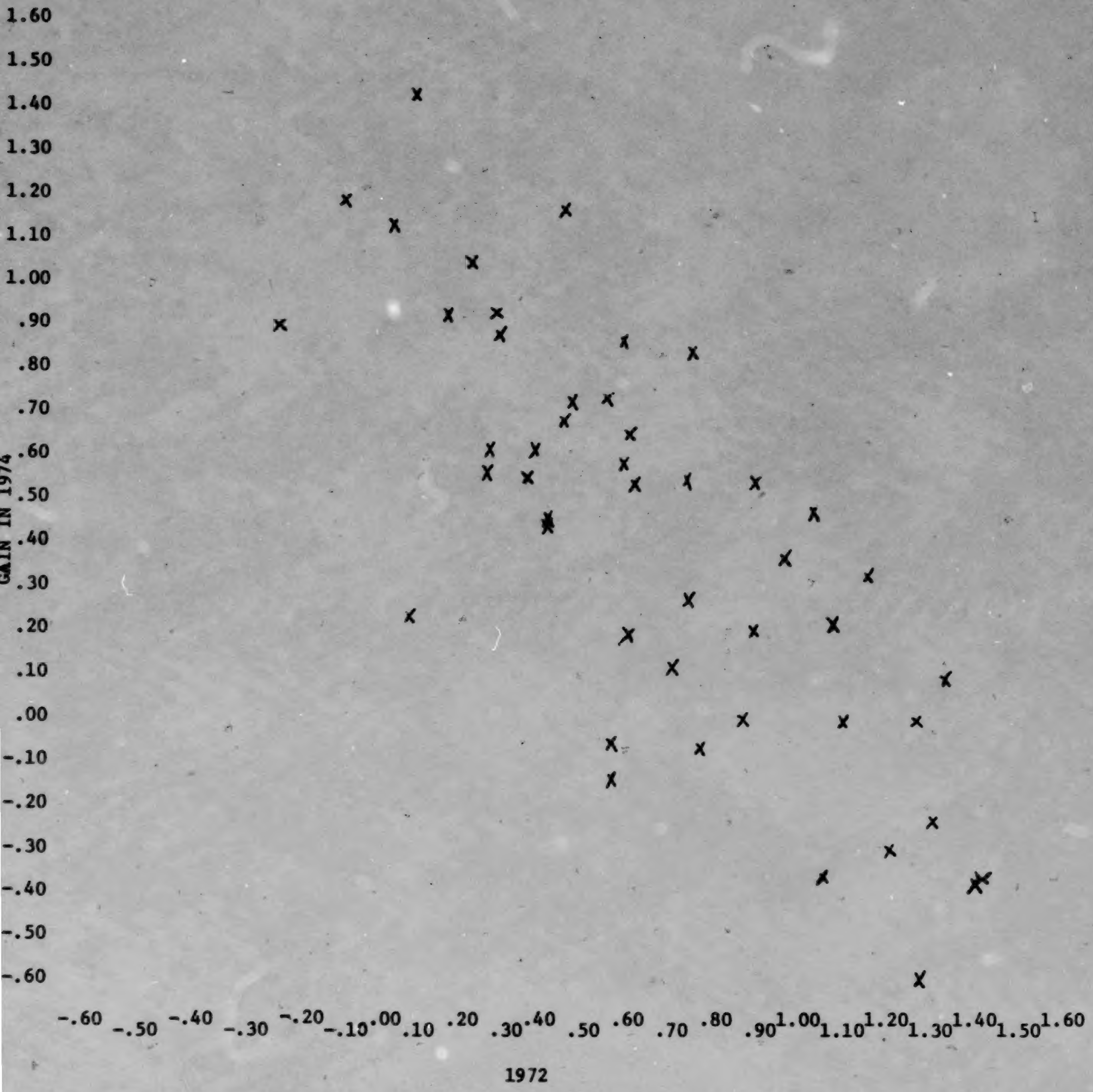


Fig. 6.2. The plot of 1972 school scores by 1974 gain for fifth grade white students' personal racial attitudes. (Southern subsample, N = 47 schools)

correlation between initial mean and change is -.77. Similar results occur for other elementary school measures. The correlations between initial level and change are: for black students' racial attitudes: -.60; for black students' perceptions of school racial attitudes: -.58; for white students' perceptions of school racial attitudes: -.70. In general, it appears that most of the observed improvement in race relations measures is attributable to schools that were relatively weak in 1972 but had improved substantially by 1974.

Figures 6-3 and 6-4 summarize comparisons of race relations variables in 1972 and 1974, showing results for categories of schools. Schools labeled "effective in race relations" were selected from the larger Southern Schools sample because their performance on race-relations measures was high relative to the total sample. Those labeled "comparison race relations" were characterized by approximately average race-relations measures. The schools labeled "effective in achievement" and "comparison achievement" were selected by similar criteria using achievement measures.

Figure 6-3 presents mean scores in 1972 and 1974 on elementary school race-relations measures. The graphs show that there was regression toward the mean for effective and comparison race-relations schools. The comparison schools, in general improved. The effective schools lost ground relative to their 1972 scores, and appear more typical in 1974 than in 1972. The effective and comparison achievement schools which were not selected on race-relations variables illustrate the general trend toward improvement, particularly among white students. The schools effective in achievement (EA) in 1972 were higher in racial attitude in 1972, and remained higher in 1974 than did lesser achieving schools (CA). In this case, there was no regression toward the mean over time: The EA improved in racial attitude at about the same rate as CA schools.

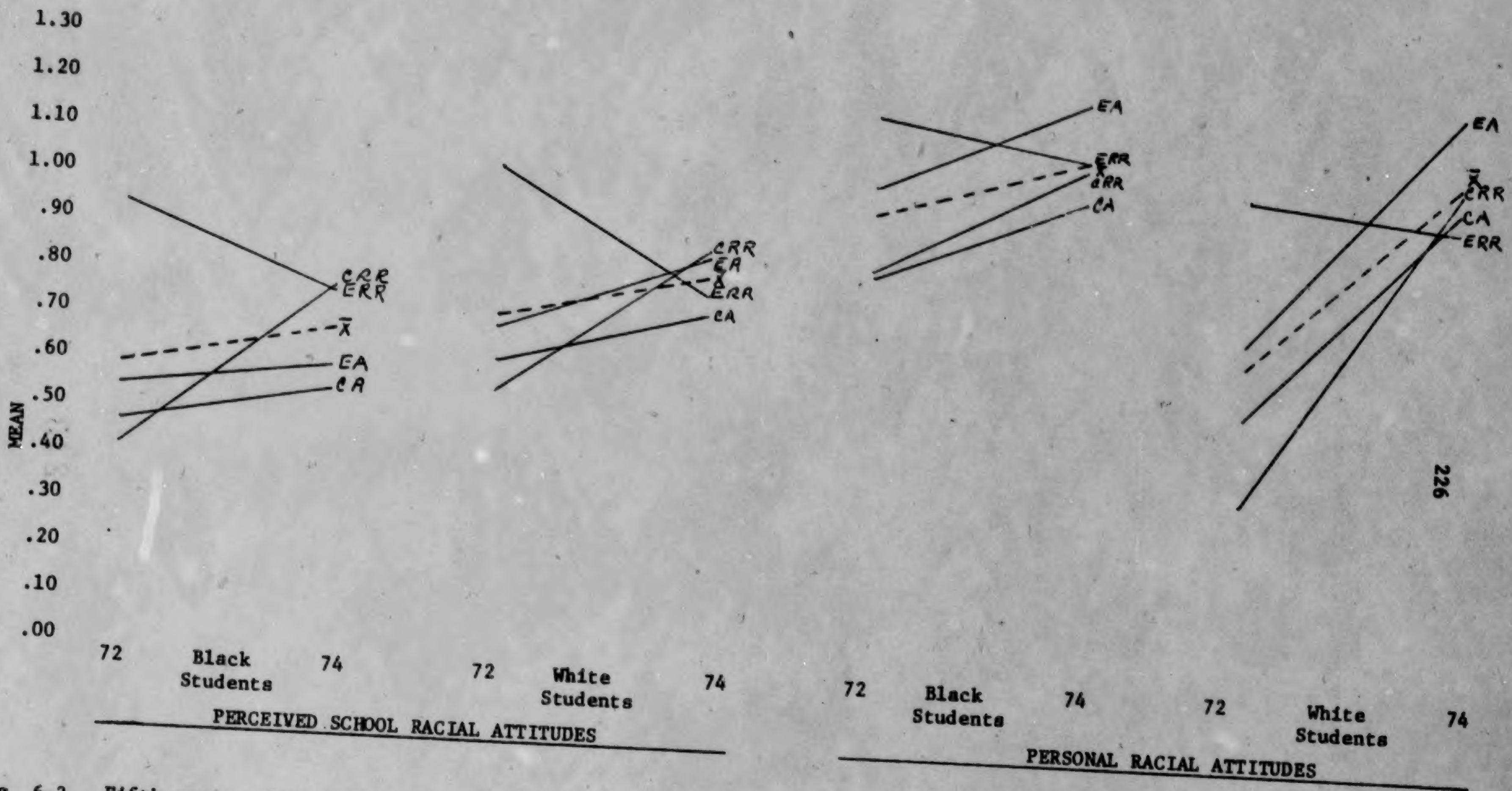


Fig. 6-3. Fifth grade. Plots of 1972 to 1974 changes in black and white students'personal and perceived school racial attitudes by four categories of schools: Effective and comparison race relations (ERR & CRR) and effective and comparison achievement (EA & CA).

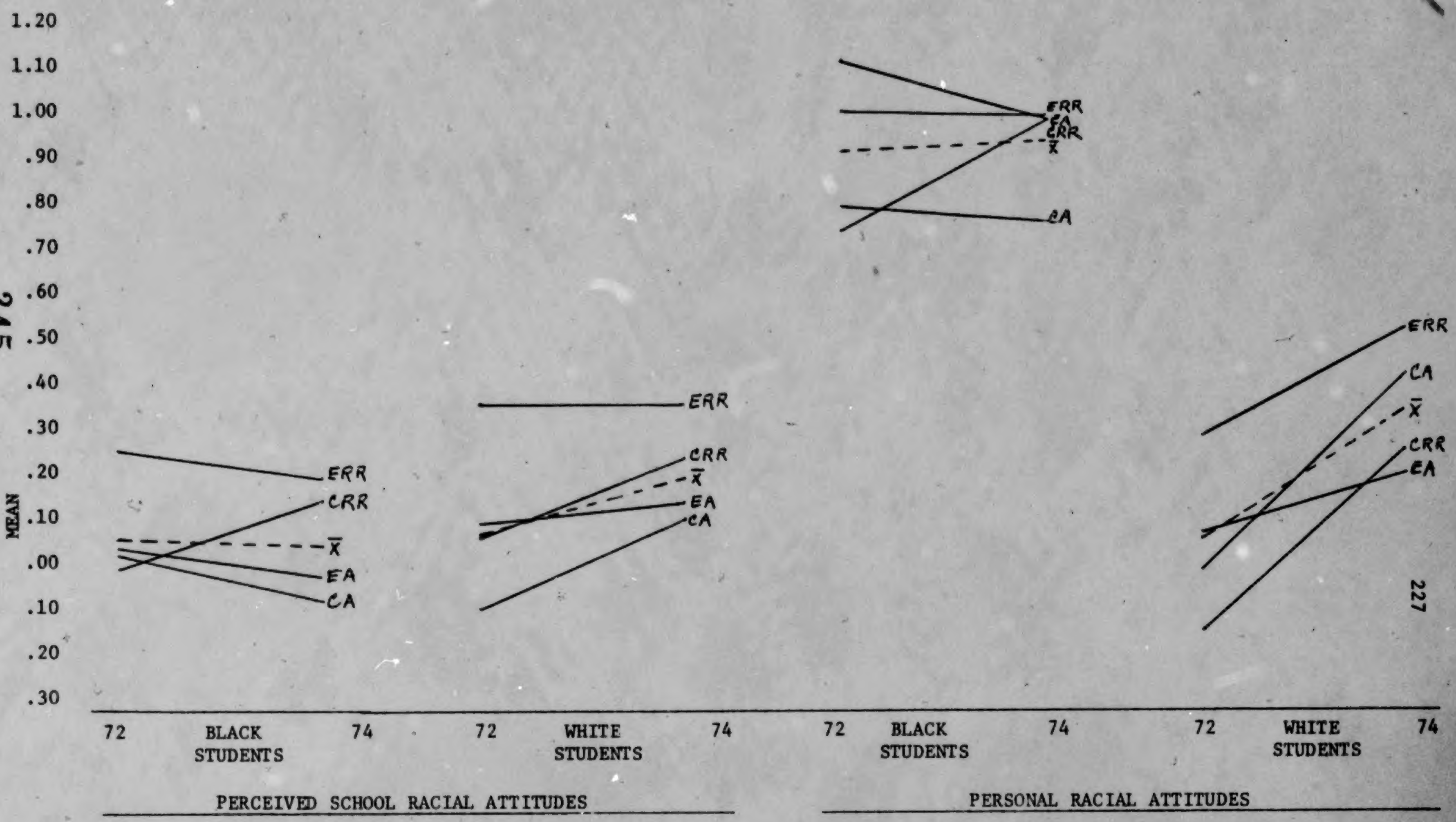


Fig. 6-4. Tenth grade. Plots of 1972 to 1974 changes in black and white students' perceived and personal racial attitudes, racial contact, and school fairness by four categories of schools: effective and comparison race relations (ERR & CRR) and effective and comparison achievement (EA & CA).

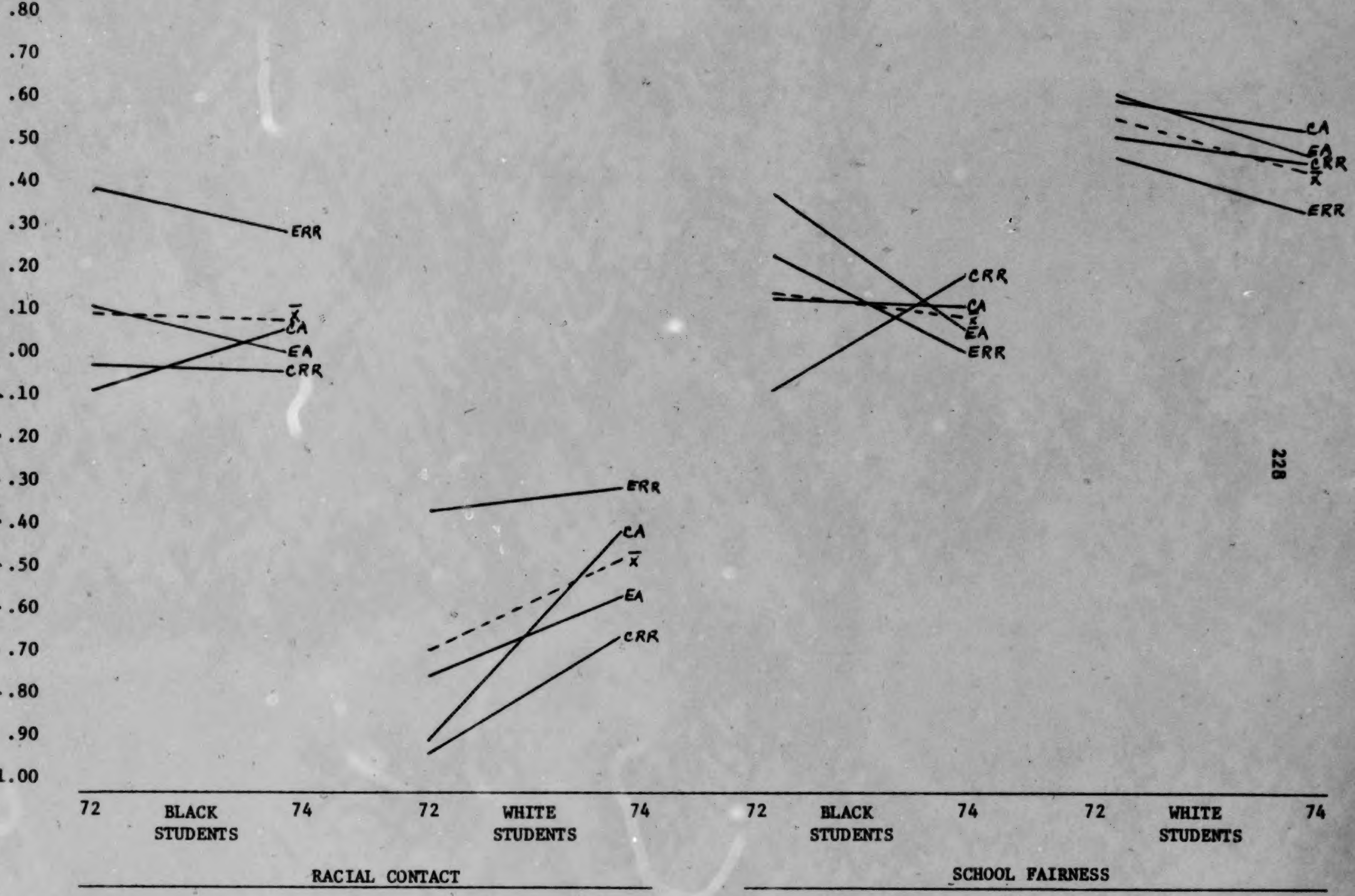


Fig. 6-4 continued.

Figure 6-4 presents comparisons on race-relations measures for high schools. In the high schools, the effective race-relations schools remained more clearly superior over the two-year period than did elementary schools. The improvement of white students' racial attitudes and interracial contact occurred in all categories of schools.

Stability of School Outcomes

Do schools tend to retain their relative status on outcome variables across years? A positive answer, manifested by a substantial correlation between an outcome in year 1 with the same outcome in year 2, would suggest that schools that consistently lead the pack or trail the pack provide useful exemplars. Such a result would lead to the hypothesis that there are causal factors operating over a period of time, either in the schools or in the communities, that lead to similar results for succeeding generations of students.

There are possible social and educational changes that might work against stability of outcome in the correlational sense. One such situation was exemplified in the results described in the previous section. A general improvement across a whole sample may reflect differential improvement of previously weaker schools. (Conversely, a general decline may reflect primarily losses on the part of previously stronger schools.) This result would be shown by higher means and decreased variability. Figure 6-1 illustrates just such a pattern of change. Figure 6-1 also suggests that the cross-year correlation in such circumstances would be low. There might also be systematic variation in school practices or community characteristics that would produce changes in relative standings among schools. Finally, especially in relation to a significant social change like integration, there may be a period during which school outcomes fluctuate widely.

The analyses in this section were done to explore the degree of outcome stability in the Southern schools that were part of both the 1972 and 1974 samples. Items making up the student outcome composites are those presented in Tables 2-1 and 2-2. The composites used in these analyses are unweighted sums.

Internal consistencies and stabilities for school means on race relations and achievement scales were estimated and are summarized in Tables 6-3 (Fifth grade) and 6-4 (Tenth grade). The scales labeled residual scales are measured as residuals from a regression estimate. The background variables that define the regression estimates are listed in each table.

The internal consistency estimates in the two tables indicate that all of the outcome scales for tenth grade white students seem to have an acceptable degree of reliability, both for the original and residual scales. Some rather severe problems with low reliability are found with the race-relations scales for black students at both the tenth and fifth grade levels as well as with some white student fifth grade race-relations scales. Values for tenth grade black students on perceived school racial attitude and racial contact appear quite low for both 1972 raw and residual scales. A similar story is found in examining reliabilities for student racial attitude and perceived school racial attitude for fifth grade black students in 1972.

Overall, the reliabilities for the residual or partialed scales appear to be somewhat higher than those obtained for the raw or unpartialed scales. The result for fifth grade white students' racial attitude is a noticeable exception. A probable reason for this result is that there are high scale reliabilities of the background measures and moderate correlations of the partialed variables with the outcome variables. The fact that the residual scale values are a linear combination of some highly reliable variables with moderate intercorrelations leads one to conclude that residual scale reliabilities should typically have higher reliabilities than would be found with raw scale reliabilities.

Table 6-3

Fifth Grade
Internal Consistency and Stability Coefficients[1]

	Black Student Scales				White Student Scales			
	Internal Consistency		Stability		Internal Consistency		Stability	
	1972	1974	Uncorrected	Corrected For Attenuation	1972	1974	Uncorrected	Corrected For Attenuation
Student Racial Attitude Sum (Residual)	.50 (.50)[a]	.68 (.69)[a]	.35 (.37)[b]	.62 (.63)[b]	.84 (.58)[a]	.56 (.77)[a]	.08 (.12)[b]	.13 (.18)[b]
Perceived School Racial Attitude Sum (Residual)	.48 (.53)	.67 (.72)	.00 (-.02)	.00 (-.03)	.54 (.85)	.72 (.64)	.10 (.10)	.15 (.14)
Achievement Sum (Residual)	.88 (.90)	.94 (.90)	.28 (.25)	.31 (.28)	.92 (.95)	.94 (.96)	.39 (.36)	.42 (.38)
Background Composite[2]	-	-	.29	.36	-	-	.76	.84

[1] N=44 schools

[2] The background composite measure used in these analyses is an unweighted composite of percent urban, percent black and the SES items common to both years.

a. Internal consistency measures in parentheses are internal consistency estimates for residual scales.

b. Stability coefficients in parentheses are partial correlations between 1972 and 1974 outcomes.

Table 6-4

Tenth Grade
Internal Consistency and Stability Coefficients[1]

	Black Student Scales				White Student Scales			
	Internal Consistency		Stability		Internal Consistency		Stability	
	1972	1974	Uncor-rected	Corrected For Attenuation	1972	1974	Uncor-rected	Corrected For Attenuation
Student Racial Attitude Sum (Residual)	.60 (.65)[a]	.65 (.71)[a]	.10 (.08)[b]	.16 (.12)[b]	.84 (.89)[a]	.68 (.80)[a]	.18 (.28)[b]	.24 (.33)[b]
Perceived School Racial Attitude Sum (Residual)	.36 (.52)	.57 (.68)	.20 (.09)	.44 (.15)	.77 (.81)	.70 (.80)	.53 (.57)	.72 (.71)
Racial Contact Sum (Residual)	.47 (.45)	.79 (.82)	.36 (.28)	.59 (.46)	.84 (.88)	.77 (.87)	.59 (.51)	.76 (.58)
Achievement Sum (Residual)	.86 (.93)	.95 (.91)	.14 (-.01)	.15 (-.01)	.94 (.96)	.96 (.94)	.25 (-.07)	.26 (-.07)
Background Composite[2]	-	-	.31	.43	-	-	.68	.76

[1] N=48 schools

[2] The background composite measure used in these analyses is an unweighted composit[illegible]rcent urban, percent black and the SES items common to both years.

a. Internal consistency measures in parentheses are internal consistency estimates for residual scales.

b. Stability coefficients in parentheses are partial correlations between 1972 and 1974 outcomes.

The columns labeled stability in Tables 6-3 and 6-4 present correlations between 1972 outcomes and 1974 outcomes for the same measures. The coefficient corrected for attenuation is a theoretical correlation that might have been achieved in the absence of measurement error.

None of the fifth grade scales show evidence of cross-year correlation. At the tenth grade level, perceived school racial attitude and racial contact for white students have some consistency (coefficients of .53 and .59 respectively), while personal racial attitude and achievement do not. For black high school students, no scales show appreciable cross-year correlation.

In attempting to understand the significance of these results, let us look first at the pattern of white high school variables that were and were not consistent across years. Perceived school racial attitude remains more alike from year to year than do the measured personal racial attitudes of the students. The respondents in the two years were in fact two different groups of tenth graders. The result for student racial attitude indicates that the attitudes of a school's 1972 tenth graders were not predictive of the attitudes of 1974 tenth graders. On the other hand, the characteristics of the school in relation to racial attitudes as perceived by 1972 students were reasonably good predictors of the same characteristics as perceived by tenth graders in 1974. It appears that prevailing social attitudes and beliefs remain relatively stable and perceptibly stable. Similarly, racial contact is in large measure a school characteristic, as well as a characteristic of individual students. It is a function of the racial composition of the school and the internal integration of school activities. These results suggest that while attitudes of students changed noticeably over the two-year period, there were consistencies in schools that were perceptible at least to white tenth graders.

A check was made to find out if changes in race relations or achievement were accompanied by marked changes in school conditions. The following changes were examined: (a) change in principal; (b) change in racial composition; (c) change in attendance patterns; (d) change in racial composition of the staff. None of these changes account for changes in achievement scores or race relations measures.

School Effects Across Time

A major focus of this study is the investigation of relationships between student outcomes and conditions and practices in schools. That investigation is presented in detail in Chapters 3 and 4. There is a particular aspect of the question that is especially pertinent to the examination of cross-year relationships. We have examined the extent to which 1972 outcomes predict 1974 outcomes. We may also ask the extent to which conditions and practices observed in 1972 predict student outcome in 1974. This kind of comparison is particularly relevant to educational planning and strategy. The consistency of effect identifies school conditions that have a long-range effect. The effect may be lasting or delayed, positive or negative. Any of these effects bears directly on the design of programs and practices.

The 1972 teacher and principal questionnaires were not designed to give a direct measure of a large number of school process variables. Therefore, relationships that can be examined using them are less detailed than those reported in Chapters 3 and 4. However, it is possible to construct measures of several important school characteristics in 1972, and to examine their relationships to outcomes in 1972 and 1974.

Tables 6-5 and 6-6 show relationships between measures obtained from teachers and principals in 1972 and student outcome measures in both 1972 and 1974 for fifth grade black and white students respectively. Tables 6-7 and 6-8 show corresponding results for tenth grade students. The values tabled are partial correlation coefficients, corrected for background measures.

There is evidence for school effects across time in the high school results. The 1974 responses to the racial attitude scale by black tenth graders (Table 6-7) are significantly related to three school measures: lack of tension among the races, a desegregation process characterized by growth and learning (both as reported by teachers), and the general level of support for integration by school staff and school officials (as reported by the principal). It will be noted that none of these three school characteristics was significantly related to the racial attitudes of black students in 1972, when the school characteristics were measured. They were more successful at predicting future student attitudes than present student attitudes. There were apparently school conditions conducive to long-range positive effects to which the contemporary black students were not responsive.

For white tenth graders, both the teachers' racial attitudes and the principal's racial attitudes in 1972 were predictive of students' racial attitudes in 1974. Both of these variables were also related to 1972 racial attitudes of white students, although the teachers' racial attitudes were more closely related to those of future students than those of present students. In addition, the teachers' report of support for integration was related to racial attitudes in both years. A positively functioning desegregation process, as reported by teachers, was significantly related to later racial attitudes but not to contemporaneously measured ones.

Table 6-5

Fifth Grade

Partial Correlation Coefficients of Black Student Outcome Measures with Teacher and Principal Variables Measured in 1972[1]

1972 Teacher Measures	Perceived School Racial Attitude		Students' Racial Attitude		Achievement	
	1972	1974	1972	1974	1972	1974
Teacher Racial Attitude	.19	.16	.33*	-.09	.29*	-.05
Support for Desegregation	-.24	.04	-.08	.02	-.05	.12
Absence of Tension	.47**	.24	.25	.10	.12	-.16
Teacher Job Attitude	-.06	.20	-.07	.19	.07	.16
Desegregation Process	-.37**	.17	-.27	-.02	-.21	.13
1972 Principal Measures						
Principal Racial Attitude	.22	.01	.30*	.07	.13	-.07
Support for Desegregation	-.37**	-.05	-.31*	.17	-.10	.11
Violence	-.13	.03	-.26	-.18	-.15	-.10

*$p < .05$

**$p < .01$

[1] N = 48 schools

Table 6-6

Fifth Grade

Partial Correlation Coefficients of White Student Outcome Measures with Teacher and Principal Variables Measured in 1972[1]

	Perceived School Racial Attitude		Students' Racial Attitude		Achievement	
1972 Teacher Measures	1972	1974	1972	1974	1972	1974
Teacher Racial Attitude	.18	.10	.18	.12	.22	-.04
Support for Desegregation	-.19	-.15	-.29*	.07	-.11	-.14
Absence of Tension	.41**	.27	.03	.27	.03	-.22
Teacher Job Attitude	.01	.21	.05	.17	.08	.11
Desegregation Process	-.36**	-.28*	-.07	-.24	-.06	.23
1972 Principal Measures						
Principal Racial Attitude	.41**	-.06	.40**	.08	.14	-.06
Support for Desegregation	-.40**	.05	-.26	.05	.11	.20
Violence	-.12	.25	-.19	.04	-.06	-.10

*p < .05

**p < .01

[1] N = 48 schools

Table 6–7

Tenth Grade

Partial Correlation Coefficients of Black Student Outcome Measures with Teacher and Principal Variables Measured in 1972[1]

1972 Teacher Measures	Perceived School Racial Attitude 1972	Perceived School Racial Attitude 1974	Students' Racial Attitude 1972	Students' Racial Attitude 1974	Racial Contact 1972	Racial Contact 1974	Achievement 1972	Achievement 1974
Teacher Racial Attitude	-.08	-.18	.28*	.14	.01	.16	.29*	-.01
Support for Desegregation	-.06	-.12	-.09	-.15	-.23	-.24	-.18	-.01
Absence of Tension	.59**	.14	.18	.42**	.14	.14	.04	-.06
Teacher Job Attitude	.01	.11	-.12	-.04	-.05	-.32*	-.19	-.16
Desegregation Process	-.43**	-.10	-.27	-.31*	-.12	-.01	-.22	.22
1972 Principal Measures								
Principal Racial Attitude	.03	.19	.14	.26	.18	.23	.33*	-.03
Support for Desegregation	.02	-.06	-.03	-.28*	-.31*	-.39**	-.15	-.06
Violence	-.45**	-.37**	-.19	-.11	-.13	-.05	-.16	-.13

*$p < .05$

**$p < .01$

[1] N = 48 schools

Table 6-8

Tenth Grade

Partial Correlation Coefficients of White Student Outcome Measures with Teacher and Principal Variables Measured in 1972[1]

	Perceived School Racial Attitude		Students' Racial Attitude		Racial Contact		Achievement	
1972 **Teacher Measures**	1972	1974	1972	1974	1972	1974	1972	1974
Teacher Racial Attitude	.08	.07	.34**	.50**	.42**	.46**	.09	.14
Support for Desegregation	-.21	.06	-.42**	-.41**	-.39**	-.37**	-.20	.05
Absence of Tension	.44**	.35*	-.04	.23	-.03	.26	.22	.23
Teacher Job Attitude	-.03	-.02	-.37**	-.22	-.39**	-.17	-.25	-.11
Desegregation Process	-.35*	-.26	-.11	-.36**	-.17	-.28*	-.17	-.09
1972 **Principal Measures**								
Principal Racial Attitude	.17	.17	.36**	.30**	.33*	.17	.23	.19
Support for Desegregation	.09	-.02	-.24	-.15	-.44**	-.16	-.24	.00
Violence	-.41**	-.32*	.09	-.18	.03	-.03	-.29*	-.10

*p < .05

**p < .01

[1] N = 48 schools

There are also 1972 school characteristics that predict 1974 racial contact and perceived school racial attitude, for both black and white students. It will be noted that a high level of violent behavior is associated with a poor perceived racial attitude for both black and white students in both 1972 and 1974.

These results indicate that there were characteristics of high schools in 1972 that were having an effect on race relations two years later. In some cases the effects were not yet apparent on contemporary students in 1972. There are a number of reasons why such a delayed effect may have occurred. When desegregation or the desegregation pattern was new, many students had not had the chance to be influenced by a school's personnel and practices. It is probable that in early stages of integration, tensions and community influences from outside the school compete strongly with the school's influence. It is also probable that in many cases programs and practices were in early stages of development in 1972 and had greater effects on later generations of students. Perhaps the major policy implication of these findings is that neither lack of outcome consistency from year to year nor absence of observable effects in a given year is a necessary indication that programs and practices are ineffective.

The results indicating school effects across time are limited to race relations at the high school level. They do not occur to the same degree in elementary schools, nor with regard to achievement at either school level. The effects of school characteristics on contemporary race relations are discussed in detail in Chapters 3 and 4.

Comparisons of Outcomes in 1974 and 1975

Schools were selected for further data collection in 1975 on the basis of 1974 scores on a composite of race-relations items from the student questionnaire. The composite combined the responses of black and white students and included all the items from the outcome categories labeled perceived school racial attitude, student racial attitude, and (in high school) racial contact. The main purpose for selecting these schools was to provide interview data for inclusion in a handbook on school practices promoting integration. The schools were chosen to provide as strong a contrast as possible in race relations, on the basis of 1974 data. Race relations was chosen as a focus for the 1975 study because the 1974 data showed greater effects of school conditions on race relations than on achievement.

Twelve elementary schools were selected as relatively effective in race relations on the basis of the 1974 data. Six of them were from Southern states and six from non-Southern states. Ten elementary schools were also chosen for comparison on the basis of low scores on the race-relations composite. Five were from Southern states and five from non-Southern states. Similarly, 11 effective high schools (six Southern and five non-Southern) and 10 comparison high schools (five Southern and five non-Southern) were selected. In each case the effective and comparison schools were balanced as closely as possible with regard to percent black, percent urban, black student SES, and white student SES.

A limited number of statistical analyses of 1975 data were conducted. The relatively small sample size and reduced amount of data on school characteristics reduced the number of analyses that were feasible. This chapter presents overall comparisons of these schools in 1975 as compared to 1974, and comparisons of 1975 outcomes for schools identified in 1974 as effective and less effective in race relations. Analyses relating school conditions to outcome variables measured in 1975 are presented in Chapter 4 for high schools.

Overall Comparisons

Table 6-9 presents a comparison of elementary schools on outcome variables in 1974 and 1975. In no case was there a significant change. There also were no significant differences for the two years in background variables. Table 6-10 presents comparable data for high schools. Again, there were no significant mean changes in outcome variables. There also were no significant differences in background variables.

Tables 6-9 and 6-10 show markedly less change in mean outcome measures than did the 1972-74 comparisons presented earlier. There are several differences that may account for the varying results. First, the 1974-1975 comparisons include non-Southern as well as Southern schools. Second, the time lag was one year instead of two. Third, it seems likely that the two periods of comparisons covered meaningfully different time periods in the schools' experience with integration. Most of the Southern schools studied were newly integrated in 1972. A relatively greater change in early years of integration than in later years is not surprising. The non-Southern schools--studied for the first time in 1974--had a considerably longer history of experience with integrated student bodies.

1975 Outcomes for Effective and Comparison Schools

Table 6-11 reports analyses of covariance on 1975 race-relations outcomes in elementary schools. The schools labeled effective scored high in 1974 on a composite of race-relations items combining responses of black and white students. The "summary race relations" dependent variable is a composite of race-relations responses by black and white students in 1975. The other dependent variables are the race-relations composites described in Chapter 2. The effective and comparison schools did not differ significantly in 1975 with respect to percent black, percent urban, black student SES, or white student SES.

Table 6-9

Fifth Grade

Comparison of Race Relations and Achievement Outcomes in 1974 and 1975[1]

	N^2	1974 Mean (SD)	1975 Mean (SD)	Change	t
Perceived School Racial Attitude					
Black Students	21	.58 (.44)	.64 (.51)	+.06	-.41
White Students	22	.82 (.41)	.75 (.41)	-.07	.52
Student Racial Attitude					
Black Students	21	1.13 (.42)	1.21 (.38)	+.08	-.70
White Students	22	1.34 (.36)	1.34 (.33)	.00	.03
Achievement Sum Black Students	19	29.33 (6.82)	27.42 (5.12)	-1.91	1.02
White Students	19	37.06 (4.96)	34.14 (7.15)	-2.92	1.49

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[1] N=22 schools

[2] Attrition due to low student N's within schools and lack of 1974 achievement data

* $p < .05$ ** $p < .01$

Table 6-10

Tenth Grade

Comparison of Race Relations Achievement Outcomes in 1974 and 1975[1]

	N[2]	1974 Mean (SD)	1975 Mean (SD)	Change	t
Perceived School Racial Attitude					
Black Students	21	.16 (.61)	.14 (.52)	-.02	.09
White Students	21	.26 (.50)	.25 (.50)	-.01	.10
Student Racial Attitude					
Black Students	21	.92 (.41)	1.01 (.42)	+.09	-.66
White Students	21	.55 (.52)	.64 (.56)	+.09	-.57
Racial Contact					
Black Students	21	.11 (.59)	.04 (.51)	-.07	.42
White Students	21	-.19 (.65)	-.21 (.55)	-.02	.12
School Fairness					
Black Students	21	.25 (.31)	.22 (.40)	-.03	.28
White Students	21	.51 (.39)	.59 (.38)	+.08	-.67
Achievement Sum					
Black Students	19	23.36 (3.92)	23.64 (5.59)	+.28	-.18
White Students	19	34.11 (4.72)	34.22 (5.41)	+.11	-.07

[1] N = 21 Schools

[2] Attrition due to lack of 1974 data

*p < .05 **p < .01

Table 6-11

Fifth Grade

Analysis of Covariance of 1975 Race-Relations Outcomes

Outcome Variables	Covariate[a]		Effective vs. Comparison (Based on 1974 Results)	
	MS	F[b]	MS	F[b]
Summary Race Relations	.30	.21	2.96	2.14
Perceived School Racial Attitude				
Black Students	.51	2.59	1.21	6.07*
White Students	.03	.17	.14	.82
Personal Racial Attitudes				
Black Students	.74	6.19*	.00	.03
White Students	.04	.39	.13	1.16

[a] Covariate: Non-Southern =1; Southern =2.
[b] With 1, 19 degrees of freedom
*p<.05 **p<.01

On one dependent variable--the personal racial attitudes of black students--there was a significant effect of the South/non-South variable. (Students in non-Southern schools had more positive attitudes.) There were no significant differences in white student responses, nor in the summary measure.

The effect of the effective/comparison variable is significant for school racial attitude as perceived by black students. Schools identified in 1974 as effective in race relations were described by black students in 1975 as having better racial attitudes. The other dependent variables and the summary measure were not significantly different in 1975.

High school results relating the 1974 categorization of effective and comparison schools to outcomes in 1975 are presented in Table 6-12. Two dependent variables are related to the geographical variable: the personal racial attitudes of white students (more positive in non-Southern schools) and racial contact of white students (greater in non-Southern schools).

The high schools labeled effective in 1974 are superior in 1975 on the race-relations summary measure. The results for the other dependent variables suggest that the most important sources of this consistency are the personal racial attitudes of black students and the schools' general racial attitude as perceived by white students.

There is greater evidence of stability between outcomes in 1974 and 1975 for high schools than for elementary schools. This was also true of the 1972-74 comparisons. However, there is at least some degree of stability in elementary schools in the 1974-75 comparisons--as indicated by the significant results for school racial attitude as perceived by black students.

Table 6-12

Tenth Grade

Analysis of Covariance of 1975 Race-Relations Outcomes

Outcome Variables	Covariate[a]		Effective vs. Comparison (Based on 1974 Results)	
	MS	F[b]	MS	F[b]
Summary Race Relations	.57	.55	11.21	10.93**
Perceived School Racial Attitude				
Black Students	.45	1.93	.65	2.76
White Students	.40	2.00	.91	4.54*
Personal Racial Attitudes				
Black Students	.32	2.68	1.01	8.36**
White Students	2.22	10.89**	.34	1.66
Racial Contact				
Black Students	.78	3.54	.48	2.18
White Students	1.89	9.15**	.51	2.46
School Fairness				
Black Students	.18	1.16	.18	1.12
White Students	.05	.31	.00	.02

[a] Covariate: Non-Southern =1; Southern =2

[b] With 1, 18 degrees of freedom

*p<.05 **p<.01

Implications of the Cross-Year Comparisons

The 96 Southern schools compared in 1972 and 1974 were characterized by notable change. The change was manifested in both overall alteration in race relations and relative instability of outcomes for individual schools. There is evidence in the correlations between school characteristics and students' racial attitudes that the schools are having at least some effect on race relations. Moreover, the fact that some of these correlations are across years, suggests that school conditions have a lasting effect. The correlation between a school characteristic and the attitudes of students two years later indicates that there is some continuing effect on school programs and social relations. Since these correlational analyses were corrected for variations in socioeconomic status of students, racial composition of the school, and school district population, there is reason to look for sources of improvement in school programs.

The analyses of 43 schools in 1974 and 1975 indicate that there was less change during this shorter and later period. There were no significant changes across all schools in mean race relations and achievement measures. There was a tendency for schools that scored high in race relations in 1974 to retain higher scores in 1975, although this did not occur in relation to all measures of race relations. The two samples for cross-year comparison differed in composition, making it difficult to determine the source of the relatively greater volatility in the 1972-74 comparisons. The Southern schools compared in 1972 and 74 were undergoing social change in the midst of communities undergoing social change. Under such circumstances, the results cast doubt on the assumption that one can predict attitudes and achievement of a school's future students from those of its present students.

That there should be difficulties in identifying schools that exemplify outstanding performance from year to year does not mean that effective programs and practices cannot be identified. On the contrary, the correlations between school outcomes and school conditions, presented in this chapter, and the more detailed study of such relationships, reported in Chapters 3 and 4, suggest that there are indeed school effects and that these effects may be lasting. The evidence that school conditions have an influence on students' attitudes, over and above that of uncontrollable background conditions, offers opportunities for schools to improve the process and outcome of racial integration.

APPENDIX A

INSTRUMENTS

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OMB NO. 51-S74003
APPROVAL EXPIRES June 30, 1975

EDUCATIONAL TESTING SERVICE PRINCETON, N.J. 08540

TEACHER QUESTIONNAIRE

Dear Teacher:

The Superintendent of Schools in your district and your own school principal have agreed to participate in a large scale study of the conditions and processes of effective desegregation. The U. S. Office of Education is trying to learn all it can that will help them at the federal level, and school administrators at the local level, to design and carry out programs which will effectively achieve desegregation goals.

Participants will include 5th and 10th grade students, teachers, principals, high school guidance counselors, and school superintendents.

The evaluation will not release data which in any way will identify you.

Our grateful thanks in advance for your cooperation.

Sincerely,

Garlie Forehand

Garlie Forehand
Project Director

A-3

Please circle the one response that best describes your answer.

1. Are you currently a

   1 Third-grade teacher

   2 Fourth-grade teacher

   3 Fifth-grade teacher

   4 Other elementary teacher
   (SPECIFY) ____________________

   5 High-school teacher of academic subject

   6 High-school teacher of business or vocational courses

   7 High-school physical education teacher

   8 Other high-school teacher
   (SPECIFY) ____________________

2. Which age group are you in?

   1 25 or under

   2 26 - 35

   3 36 - 45

   4 46 - 55

   5 56 - 65

   6 Over 65

3. Are you male or female?

   1 Male

   2 Female

4. Which of the following best describes you?

   1 Black

   2 White

   3 Spanish speaking

   4 Other

5. What is the highest level of education you have completed?

   1 Less than one year of college

   2 1 - 3 years of college

   3 4 years of college

   4 More than 4 years of college

   5 Master's degree

   6 Graduate work beyond Master's

   7 Doctor's degree

6. Everything concerned would you say you are very happy, pretty happy, or not too happy these days?

   1 Very happy

   2 Pretty happy

   3 Not too happy

7. On the whole, how would you evaluate the way in which desegregation is working out in your school?

   1 Almost no problems

   2 Some minor problems

   3 Some serious problems

   4 Many serious problems

   5 Does not apply

8. Here is a list of things that have happened in some desegregated schools. Please indicate whether or not each of these things happened at your school.

YES	NO	DOES NOT APPLY	
1	2	3	A greater amount of fighting than before desegregation
1	2	3	Minority groups demanding ethnic studies
1	2	3	All students are learning more
1	2	3	Teachers from different groups are learning to work well together
1	2	3	White students are becoming less prejudiced
1	2	3	New educational programs are improving schools
1	2	3	There is a very tense relationship between black and white students.

9. Some people say that black students would really be better off in all-black schools. Others say that black students are better off in racially mixed schools. What do you think?

   1 Most black students are better off in all-black schools

   2 Most black students are better off in mixed schools

10. What about white students - do you think that white students are better off in all-white schools, or are they better off in racially mixed schools?

1 Most white students are better off in all-white schools

2 Most white students are better off in mixed schools

11. During this school year, have you taken any in-service training, college courses, workshops, or other teacher education dealing with intergroup relations or instruction of disadvantaged students?

1 I haven't taken any training

2 Yes, intergroup relations

3 Yes, instruction of disadvantaged

4 Yes, both intergroup relations and instruction of disadvantaged

5 Took training, but not on those topics

12. Which one of the following best describes the amount of time you spent at those teacher-education sessions and preparing for them?

1 I haven't taken any training

2 1 day or less

3 2 or 3 days

4 About a week

5 8 - 13 days

6 2 weeks or more

13. On the whole, how would you evaluate the in-service training?

1 I haven't taken any training

2 It was a valuable experience for me

3 It was all right, but I didn't learn much

4 It was mostly a waste of time, but I did learn something

5 It was a complete waste of time

14. Can you think of any way you have changed your thinking as a result of this in-service training?

1 I haven't taken any training

2 No, I can't think of anything specific

3 Yes, I can think of a specific change

15. How much time do you usually spend each day preparing for the next day's classes?

1 I don't spend any time in preparation

2 Approximately one hour per day

3 Approximately two hours per day

4 Approximately three hours per day or more

16. Do other teachers ever ask you for advice about their teaching problems?

1 Yes, often

2 Yes, occasionally

3 Yes, seldom

4 No, never

17. What proportion of your white students would you say are discipline problems - cut classes, damage property, get into fights?

1 20% or more

2 15 - 19%

3 10 - 14%

4 5 - 9%

5 Less than 5%

6 Does not apply

18. What proportiaon of your black students would you say are discipline problems - cut classes, damage property, get into fights?

1 20% or more

2 15 - 19%

3 10 - 14%

4 5 - 9%

5 Less than 5%

6 Does not apply

19. What proporation of your white students would you say are performing by your standards for this grade level?

1 Almost all are doing adequate work

2 More than half are doing adequate work

3 Less than half are doing adequate work

4 Very few are doing adequate work

5 Does not apply

20. What proportion of your black students would you say are performing adequately by the same standards?

1 Almost all are doing adequate work

2 More than half are doing adequate work

3 Less than half are doing adequate work

4 Very few are doing adequate work

5 Does not apply

21. A number of schools have adopted multi-ethnic texts which discuss minority-group leaders and portray minority-group characters. Are texts of this type used in your school?

1 Yes, most of the texts discuss minority groups

2 Some of the texts are multi-ethnic, but most are not

3 No, none of the texts are multi-ethnic

22. Have there been any special projects in this school, such as plays or group discussions, which deal openly with inter-group problems?

1 No, not to my knowledge

2 Yes, I know of one such project

3 Yes, several projects

23. How often do you have class discussions about race?

1 Once a week or more

2 Once a month

3 Once every few months

4 No such discussions so far

24. Think for a moment about the three teachers you talk with most often at this school. Are they the same racial (or ethnic) group as you are?

1 Yes, all same group as me

2 No, one or more is from another group

3 All teachers in this school are the same group

25. Every teacher is bothered by some things about teaching. Look at this list of things that may have been a source of frustration to you this year. Put an "X" in the "yes" column if you have felt this way, or an "X" in the "no" column if you have not.

YES	NO	
1	2	There is just too much work to do.
1	2	Many of my students won't try to learn
1	2	The range of ability among my students makes it really hard to keep them all interested and learning.
1	2	I feel as if I have a great deal of responsibility and no one to share it with.
1	2	I feel as if no one appreciates my work.
1	2	Too often I feel I don't have the training to solve some of the problems I am faced with.
1	2	I feel the atmosphere is tense in this school.

26. Do you feel scores on standardized tests are generally a good indicator of a pupil's ability?

1 Yes, good indicator

2 No, not good indicator

27. Are you enjoying teaching more or less this year than you did last year?

1 I enjoy teaching more this year than last year

2 I enjoy teaching less this year than last year

3 I really don't feel any difference

4 Does not apply

28. How often, this school year, have you gone to the head of your department or the principal to get advice on a teaching problem you were encountering?

1 I haven't done this at all

2 I asked for advice once or twice this year

3 I asked for advice 3 to 10 times

4 More than 10 times

5 Does not apply

29. Compared to what you think other principals in other school are like, do you think this school's principal is better than the average, as good as most, or below average?

1 Principal is outstanding
2 Principal is better than average
3 Principal is as good as most
4 Principal is below average

30. Are any of the teachers in this school unfair to black students?

1 Almost all of them
2 Many of them
3 A few
4 Only one teacher
5 None
6 Does not apply

31. Are any of the teachers in this school unfair to white students?

1 Almost all of them
2 Many of them
3 A few
4 Only one teacher
5 None
6 Does not apply

32. As far as you know, has your principal talked with any teachers because they have treated black students unfairly?

1 Yes
2 No
3 No unfair teachers
4 Does not apply

33. As far as you know, has your principal talked with any teachers because they have treated white students unfairly?

1 Yes
2 No
3 No unfair teachers
4 Does not apply

34. For how many years have you worked with pupils of other racial or ethnic groups - that is, with students from a racial (or ethnic) group different from your own?

1 Never
2 1 year (this is my first year)
3 2 years
4 3 years
5 4 years
6 5 or more years

35. As far as you know, how do each of the following feel about desegregation?

LIKE IT VERY MUCH
LIKE IT SOMEWHAT
DO NOT CARE
DISLIKE IT SOMEWHAT
DISLIKE IT VERY MUCH
DON'T KNOW
DOES NOT APPLY

1 2 3 4 5 6 Most of your students
1 2 3 4 5 6 The principal of this school
1 2 3 4 5 6 The superintendent of this school district
1 2 3 4 5 6 7 Most white teachers in this school
1 2 3 4 5 6 7 Most black teachers in this school

36. Listed below are some statements other people have made. For each, please mark whether you strongly agree, agree somewhat, disagree somewhat, or strongly disagree.

STRONGLY AGREE
AGREE SOMEWHAT
DISAGREE SOMEWHAT
STRONGLY DISAGREE

1 2 3 4 The amount of prejudice against minority groups in this country is highly exaggerated.
1 2 3 4 I would like to live in an integrated neighborhood.
1 2 3 4 The civil rights movement has done more good than harm.
1 2 3 4 Blacks and whites should not be allowed to intermarry.

37. If you had to choose one factor which accounts most for failure of the black to achieve equality, which would you choose - a lack of initiative and drive, or the restrictions imposed by a white society?

1 Lack of initiative and drive

2 Restrictions imposed by a white society

38. In some schools, a students who is placed in a particular ability class will almost always stay in that level until he graduates; in other schools, a fairly large number of students are changed into different levels before they graduate. What happens in your school?

1 We do not separate students by ability level or into different academic programs

2 Very few students change from one academic level or program to another

3 Approximately one student out of every ten changes between the time he enters school and the time he leaves.

4 More than one-tenth of the students change

39. Would you say that your school is trying harder this year than it has in the past to get parents to visit the school or come to PTA or other parent groups, or is it not trying as hard?

1 School is trying harder this year

2 School is not trying as hard this year

3 No difference

40. In some school years, a teacher learns a lot about education, while in other years a teacher doesn't learn much. This year, have you learned a lot about:

YES NO

1 2 new materials, new kinds of texts, supplementary materials?

1 2 theories of teaching reading?

1 2 effective methods of maintaining discipline?

1 2 how to handle intergroup relations among students?

1 2 being less afraid of other racial and ethnic groups?

1 2 minority-group history?

1 2 how better to deal with heterogenous classes?

41. Below is a list of programs and practices which are being used in some schools to improve race relations. If these programs or practices exist in your school, we would like to know how helpful you think they are in promoting good race relations. Please mark whether each of the following is very helpful, somewhat helpful, not very helpful, harmful or does not exist in this school.

VERY HELPFUL FOR RACE RELATIONS
SOMEWHAT HELPFUL FOR RACE RELATION
NOT VERY HELPFUL FOR RACE RELATION
HARMFUL FOR RACE RELATIONS
DOES NOT EXIST IN THIS SCHOOL

1 2 3 4 N Guidance counselors program

1 2 3 4 N Social worker/home visitor program

1 2 3 4 N Teacher aides

1 2 3 4 N Teacher workshops or in-service training for teachers or aides

1 2 3 4 N Remedial reading program

1 2 3 4 N Vocational training courses

1 2 3 4 N Minority group history or culture courses

1 2 3 4 N Special classrooms for underachievers

1 2 3 4 N Special classrooms for socially or emotionally maladjusted

1 2 3 4 N Achievement grouping of classrooms

1 2 3 4 N Achievement grouping within classes

1 2 3 4 N Major curriculum revisions

1 2 3 4 N Extracurricular activities geared towards minority students

1 2 3 4 N Late bus for students who stay for extracurricular activities

1 2 3 4 N Program for tutoring low achieving students

1 2 3 4 N Special program to increase parent-teacher contact (e.g., conferences)

1 2 3 4 N Programs to improve intergroup relations among students

1 2 3 4 N Programs to improve intergroup relations among teachers

1 2 3 4 N Bi-racial advisory committee of students

1 2 3 4 N Student use of equipment, such as reading machines, tape recorders, videotape machines, etc.

1 2 3 4 N Team teaching

1 2 3 4 N Ungraded classes

1 2 3 4 N Demonstration or experimental classrooms

42. We would like your honest opinion on differences between black and white boys and girls. In your personal experience, what have you found? Please select an answer from each of the two columns.

	BOYS				GIRLS			
	BLACKS	WHITES	NO DIFFERENCE	NOT APPLICABLE	BLACKS	WHITES	NO DIFFERENCE	NOT APPLICABLE
Who are more active?	3	2	1	N	3	2	1	N
Who generally read better?	3	2	1	N	3	2	1	N
Who are better musically?	3	2	1	N	3	2	1	N
Who are most athletic?	3	2	1	N	3	2	1	N
Who are better adjusted to school?	3	2	1	N	3	2	1	N
Who are quicker to catch on to new concepts?	3	2	1	N	3	2	1	N
Who are generally more attentive in class?	3	2	1	N	3	2	1	N
Who do you like to teach better?	3	2	1	N	3	2	1	N
Who get along better socially?	3	2	1	N	3	2	1	N
Who are more achievement oriented?	3	2	1	N	3	2	1	N
Who cause more trouble in class?	3	2	1	N	3	2	1	N
Who need more help from you?	3	2	1	N	3	2	1	N

43. How much choice did you personally, have in

COMPLETE CHOICE	A LOT OF CHOICE	SOME CHOICE	LITTLE CHOICE	ALMOST NO CHOICE	NOT APPLICABLE	
5	4	3	2	1	N	Getting a job in this particular school?
5	4	3	2	1	N	Selecting the grade or courses you wished to teach?
5	4	3	2	1	N	Selecting the kinds of students you wished to teach?
5	4	3	2	1	N	Selecting the textbooks, workbooks, etc.
5	4	3	2	1	N	Acquiring the necessary supplies?
5	4	3	2	1	N	Establishing your own routine or schedule?
5	4	3	2	1	N	Teaching according to your own style?

44. During the time you are actually teaching your students? how often do you

SEVERAL TIMES AN HOUR	SEVERAL TIMES A DAY	AT LEAST ONCE A DAY	ONCE OR TWICE A WEEK	ALMOST NEVER	
5	4	3	2	1	Warn students to pay attention
5	4	3	2	1	Give directions
5	4	3	2	1	Praise students for their accomplishments
5	4	3	2	1	Scold students for misbehaving
5	4	3	2	1	Ask questions
5	4	3	2	1	Have class discussions

45. Compared to other schools that you know about, would you say that the tone of this school is more strict, more easy going, or about average?

1 More strict

2 More easy going

3 About average

46. If you had to rank order the following objectives for your school, how would you rank them? Please mark your first choice 1, your second choice 2, and your third choice 3.

1 2 3 Good relations with the community

1 2 3 Good academic achievement

1 2 3 Good race relations

47. We would like to find out how people get along together in your school. Mark one choice telling how each of the following people get along together.

5 OPEN, WARM (OFTEN INTERACT)
4 FRIENDLY
3 POLITE
2 DISTANT, COOL (SELDOM INTERACT)
1 HOSTILE
N NOT APPLICABLE

5 4 3 2 1 N You and the Principal
5 4 3 2 1 N You and the black teachers
5 4 3 2 1 N You and the white teachers
5 4 3 2 1 N You and the parents of your black students
5 4 3 2 1 N You and the parents of your white students
5 4 3 2 1 N You and the black students
5 4 3 2 1 N You and the white students
5 4 3 2 1 N The principal and the teachers
5 4 3 2 1 N The principal and the black students
5 4 3 2 1 N The principal and the white students
5 4 3 2 1 N Black teachers and white teachers
5 4 3 2 1 N Black students and white students

48. In general, how much influence do you think the following persons or groups have in this school? For each of the following, please rate their actual influence over the way your school is run.

5 MOST INFLUENCE
4 CONSIDERABLE INFLUENCE
3 MODERATE INFLUENCE
2 SOME INFLUENCE
1 LITTLE OR NO INFLUENCE
N NOT APPLICABLE

5 4 3 2 1 N The school board
5 4 3 2 1 N The superintendent
5 4 3 2 1 N The principal
5 4 3 2 1 N The assistant principal
5 4 3 2 1 N Black teachers
5 4 3 2 1 N White teachers
5 4 3 2 1 N You, yourself
5 4 3 2 1 N Black students
5 4 3 2 1 N White students
5 4 3 2 1 N Black parents
5 4 3 2 1 N White parents

49. In general, do you think the principal and his administrative staff are trying to be supportive and helpful to the black teachers in this school?

1 Yes, they are trying their best

2 They try some, but not enough

3 They hardly try at all

50. In general, do you think the principal and his administrative staff are trying to be supportive and helpful to the white teachers in this school?

1 Yes, they are trying their best

2 They try some, but not enough

3 They hardly try at all

HIGH SCHOOL TEACHERS PLEASE NOTE

Please skip to page 11 now and answer questions H-1 to H-13

ELEMENTARY TEACHERS PLEASE NOTE

Please turn to page 9 now and answer question E-1 to E-16

FOR TEACHERS IN ELEMENTARY GRADES

E-1. Are you involved in a team teaching program with more than one teacher (not an aide) sharing students and teaching them?

1 Yes, all day
2 Yes, part of every day
3 Yes, on some days
4 No

E-2. Do you have any teacher aides working with you and your students?

1 Yes, full time for my class
2 Yes, part time for my class
3 No

E-3. In an average week, how much extra time (not counting homework) do most poor readers spend in reading?

1 None
2 1 hour to 2 hours a week extra
3 3 or more hours a week extra

E-4. In an average week, how much extra time (not counting homework) do most poor math students spend on arithmetic?

1 None
2 1 hour to 2 hours a week extra
3 3 or more hours a week extra

E-5. I usually don't permit students to talk in class unless they first raise their hands.

1 Agree
2 Disagree

E-6. How many black students and white students do you teach?

_____ Black students
_____ White students

E-7. Listed below are some statements. For each, please mark whether you strongly agree, agree somewhat, disagree somewhat, or strongly disagree.

STRONGLY AGREE	AGREE SOMEWHAT	DISAGREE SOMEWHAT	STRONGLY DISAGREE	
4	3	2	1	A regular routine helps students to develop good habits.
4	3	2	1	Students learn better when they work at what they themselves prefer.
4	3	2	1	To sit still and pay attention is a necessary skill for survival in the academic world.
4	3	2	1	Praise for accomplishment is the most important concept in teaching.
4	3	2	1	Students learn best by actively exploring their environment
4	3	2	1	Textbooks and workbooks are important for academic achievement.
4	3	2	1	The less structure a class has the more students are free to learn by discovery.
4	3	2	1	A quiet, orderly classroom helps to create the atmosphere for learning.
4	3	2	1	A busy, active, noisy classroom is one filled with opportunities for learning.
4	3	2	1	It is important that students be allowed to express their feelings - even angry feelings.

E-8. Approximately how many black or white parents have talked on their own volition with you in the last month about their child?

_____ Black parents
_____ White parents

E-9. Approximately how many of your black or white students required some contact with the disciplinary staff (or office) in the last month?

_____ Black students
_____ White students

E-10. During class time, my students generally spend most of their time

1 As a total class

2 In several small groups

3 Individually

4 However they wish

E-11. During class time, my students generally are

1 Moving about, quite active

2 Allowed to move about somewhat

3 Allowed to move about only when permission is granted

4 Not allowed to move about during class time

E-12. During class time, my students generally are

1 Very noisy

2 Moderately noisy

3 Reasonably quiet

4 Very quiet

5 Allowed to speak only with permission

E-13. Do your black students ever tutor your white students?

1 Yes

2 No

E-14. Do your white students ever tutor your black students?

1 Yes

2 No

E-15. In your opinion, what one factor contributes most to good race relations at your school?

____

____

____

E-16. In your opinion, what one factor contributes most to good academic achievement at your school?

____

____

____

THANK YOU FOR THE TIME AND HELP YOU HAVE GIVEN TO THIS STUDY.

FOR HIGH SCHOOL TEACHERS

H-1. Has the school organized any new bi-racial extracurricular activities this school year?

1 Yes
2 No
3 Does not apply

H-2. Has the school taken steps to make sure that most social clubs, band, athletic teams, etc., are integrated?

1 Yes, and most are integrated
2 Yes, but many are not integrated
3 No steps have been taken officially

H-3. Compared to last year, as far as you know, has student participation in extracurricular activities increased, decreased, or remained the same in your school?

1 Increased
2 Decreased
3 Remained the same

H-4. Has the school eliminated any student dances because of possible racial problems?

1 Yes
2 No

H-5. Has the school eliminated any student elections because of possible racial problems?

1 Yes
2 No

H-6. Approximately how many black or white students do you teach?

_____ Black students
_____ White students

H-7. Approximately how many of your black or white students required some contact with the disciplinary staff in the last month?

_____ Black students
_____ White students

H-8. Which of the following curricula do you think are valued most highly by persons at your school?

COLLEGE PREPARATORY CURRICULUM	GENERAL CURRICULUM	BUSINESS CURRICULUM	VOCATIONAL CURRICULUM	ALL ARE VALUED EQUALLY	
5	4	3	2	1	By the principal
5	4	3	2	1	By the counseling staff
5	4	3	2	1	By most of the black teachers
5	4	3	2	1	By most of the white teachers
5	4	3	2	1	By most of the black students
5	4	3	2	1	By most of the white students
5	4	3	2	1	By most of the black parents
5	4	3	2	1	By most of the white parents
5	4	3	2	1	By you, yourself

H-9. Approximately how many black or white parents have talked on their own volition with you about their child in the last month?

_____ Black parents
_____ White parents

H-10. Approximately how many of your black or white students have been temporarily suspended in the last month?

_____ Black students
_____ White students

H-11. Approximately how many of your black or white students have transfered out of this school so far this year?

_____ Black students
_____ White students

H-12. In your opinion, what one factor contributes most to good race relations in your school?

____
____
____
____

OMB NO. 51-S74003
APPROVAL EXPIRES June 30, 1975

EDUCATIONAL TESTING SERVICE PRINCETON, N. J. 08540

PRINCIPAL QUESTIONNAIRE

School District: ______________ Number: ☐☐☐

Name of School: ______________ Number: ☐☐

Dear Principal:

Thank you very much for agreeing to participate in our study of the conditions and processes of effective desegregation. The U. S. Office of Education is trying to learn all it can that will help them at the federal level, and school administrators at the local level, to design and carry out programs which will effectively achieve desegregation goals.

Participants will include 5th and 10th grade students, teachers, principals, high school guidance counselors, and school superintendents.

The evaluation will not release data which in any way will identify you. The only possible exception to this rule is that we may wish to identify and discuss a few unusually exemplary schools in order to make the report more concrete and believable; however, this will never be done without your written consent.

Our grateful thanks in advance for your cooperation.

Sincerely,

Garlie Forehand
Project Director

U. S. O. E. SCHOOL DESEGREGATION STUDY
PRINCIPAL'S QUESTIONNAIRE

1. First, we would like to know about some programs, courses, and personnel. Considering the size, composition, and needs of your particular student body, please indicate (A) how adequate each feature is, (B) if that item is available to 5th graders (if elementary school) or 10th graders (if high school), and (C) if your school had that item last year (1972-73).

	A Taking into account, the size, composition, and needs of your particular student body, please circle the one number that best represents your view about each aspect.					B Is that/are (ITEM) available to 5th/10th graders? Circle one number.		C Did the school have (ITEM) last year (72-73)? Circle one number.	
	more than adequate	adequate	somewhat inadequate	considerably inadequate	do not have	Yes	No	Yes	No
(1) Guidance counselors	1	2	3	4	5	6	7	8	9
(2) Social worker or home visitor program	1	2	3	4	5	6	7	8	9
(3) Teacher aides	1	2	3	4	5	6	7	8	9
(4) Teacher workshops or in-service training for teachers/teacher aides	1	2	3	4	5	6	7	8	9
(5) Remedial reading program	1	2	3	4	5	6	7	8	9
(6) Vocational training courses	1	2	3	4	5	6	7	8	9

(7) Minority group history or culture courses	1	2	3	4	5	6	7	8	9
(8) Special classrooms for underachievers	1	2	3	4	5	6	7	8	9
(9) Special classrooms for socially or emotionally maladjusted	1	2	3	4	5	6	7	8	9
(10) Achievement grouping of classrooms	1	2	3	4	5	6	7	8	9
(11) Major curriculum revisions	1	2	3	4	5	6	7	8	9
(12) Extracurricular activities geared toward minority students	1	2	3	4	5	6	7	8	9
(13) Late bus for students who stay late for extracurricular activities	1	2	3	4	5	6	7	8	9
(14) Program for tutoring low-achieving students	1	2	3	4	5	6	7	8	9
(15) Special program to increase parent-teacher contact (e.g., conferences)	1	2	3	4	5	6	7	8	9
(16) Programs to improve intergroup relations among students	1	2	3	4	5	6	7	8	9
(17) Program to improve intergroup relations among teachers	1	2	3	4	5	6	7	8	9
(18) Bi-racial advisory committee of students	1	2	3	4	5	6	7	8	9
(19) Equipment for students to use, such as reading machines, tape recorders, video tape machine, etc.	1	2	3	4	5	6	7	8	9

2. If you had to advise a principal of a school which didn't have any of the features just mentioned, which three would you say are most important?

1. ____
2. ____
3. ____

3. Next, what is the composition of your teaching faculty and administrative staff?

	Teaching Faculty	Administrative Staff
A. Total number	______	______
B. Race Composition		
(1) Black	______	______
(2) White	______	______
(3) Other	______	______
C. Sex Composition		
(1) Males	______	______
(2) Females	______	______

4. What is the composition of your clerical staff and custodial staff?

	Clerical Staff	Custodial Staff
A. Total Number		
(1) full-time	______	______
(2) part-time	______	______
B. Race Composition		
(1) Black	______	______
(2) White	______	______
(3) Other	______	______
C. Sex Composition		
(1) Males	______	______
(2) Females	______	______

Elementary School Principals
Please skip to question 5
on page 7

High School Principals
Please continue with
question H-1

H-1 Does your school have a "career day" when representatives of various professions and occupations come to talk to the students about careers in their fields?

1 Yes

2 No

H-2 A. Do representatives from predominantly white colleges come to your school to talk to students about their colleges or universities?

1 Yes

2 No

B. Do representatives from black colleges come to your school to talk to students about their colleges or universities?

1 Yes

2 No

H-3 Do you have a work-study program -- we mean any kind of institutionalized program where students both work and attend classes?

1 Yes

2 No

H-4 When your present 10th graders were in 7th and 8th graders, approximately how many of them went to schools which had ability-grouping? Would you say almost all, over half, less than half, or very few?

1 Almost all

2 Over half

3 Less than half

4 Very few

H-5 Two ability-grouping procedures are placing students into programs by their own choice and placing students into programs primarily on the basis of test scores or teachers' recommendations. Which best describes the ability-grouping procedure used in this school?

1 Students are placed into programs -- college preparatory, vocational, etc., by their own choice.

2 Students are placed into programs or academic tracks primarily on the basis of test scores or teachers' recommendations.

3 We don't have academic programs or tracks, either because the school is too small or because we disapprove of tracking.

A. Approximately what proportion of the 10th grade academic classes -- English, Math Social Studies, etc. -- are separated by program, so that students are in class only with students in their ability-group level or program?

1 All

2 More than half

3 About half

4 Less than half

B. Are the non-academic classes, such as homeroom, gym, health, music, art -- separated by ability-group levels or tracks?

1 Yes, all are separated
2 Some are separated
3 None are separated

C. How many different levels of 10th grade English are there in this school?

1 One
2 Two
3 Three
4 Four
5 Five
6 Six
7 Seven or more

H-6 Considering the present situation facing your school, how much if anything do you think the school can do to reduce the number of white students who do not finish high school?

Have little or no effect	Have some effect	Have substantial effect	Have very great effect
1	2	3	4

H-7 How much if anything do you think the school can do to reduce the number of black students who do not finish high school?

Have little or no effect	Have some effect	Have substantial effect	Have very great effect
1	2	3	4

H-8 Are the student government officers in your school all of the same racial group, or are they from different groups?

1 All of the same racial group
2 Different groups

H-9 Are the cheerleaders in your school all of the same racial group, or are they from different groups?

1 All of the same racial group
2 Different groups

H-10 During this school year, how many students in your school have been warned or disciplined because of inappropriate dress or hair length?

H-11 How did your football team do this school year -- was the team undefeated or lost only one game, did they win more than half their games, or less than half?

No football team 1
Undefeated or lost only one game 2
Won more than half their games 3
Won less than half their games 4

H-12 How about your basketball team this school year -- was the team undefeated or lost only one game, did they win more than half their games, or less than half?

No basketball team 1
Undefeated or lost only one game 2
Won more than half their games 3
Won less than half their games 4

CONTINUE

---

5. What was the average daily absenteeism for this school in January 1974? ____________

6. What was the average daily attendance for this school in January 1974? ____________

7. Has the absenteeism of black students been greater or less in this school year than in 1972-73, or about the same?

1 Greater
2 Less
3 No change
4 No black students last year

8. Has the absenteeism of white students been greater or less this school year than it was in 1972-73, or about the same?

1 Greater
2 Less
3 No change
4 No white students last year

9. We would like to find out how people get along together in your school. What would you say about the interactions between each of the following:

OPEN, WARM (OFTEN INTERACT)	FRIENDLY	POLITE	DISTANT, COOL (SELDOM INTERACT)	HOSTILE	DOESN'T APPLY	
5	4	3	2	1	0	You and the administrative staff
5	4	3	2	1	0	You and the black teachers
5	4	3	2	1	0	You and the white teachers
5	4	3	2	1	0	You and the parents of your black students
5	4	3	2	1	0	You and the parents of your white students
5	4	3	2	1	0	You and the black students
5	4	3	2	1	0	You and the white students
5	4	3	2	1	0	Black teachers and white teachers
5	4	3	2	1	0	Black students and white students

10. Which of the following, if any, tend to produce lack of unity in the teaching staff of your particular school? (Check as many as apply)

A. Differences in teaching philosophy ____________

B. Disagreement with administration in building ____________

C. Different amounts of interest in education ____________

D. Age differences ____________

E. Sex differences ____________

F. Differences in race ____________

G. Differences in religion ____________

H. Something else: Please specify ______________________________

I. There is no lack of unity at all ____________

11. If you had to rank order the following objectives for your school, how would you rank them? Please circle your first choice 1, your second choice 2, and your third choice 3.

1	2	3	Good relations with the community
1	2	3	Good academic achievement
1	2	3	Good race relations

THANK YOU VERY MUCH FOR THE TIME AND HELP YOU HAVE GIVEN TO THIS STUDY.

OMB NO. 51-S74003
APPROVAL EXPIRES June 30, 1975

EDUCATIONAL TESTING SERVICE PRINCETON, N. J. 08540

SUPERINTENDENT INTERVIEW

School District: ______________________________

Respondent's Name: ______________ ______________

and Title: ______________________________

TIME BEGAN: ______________ AM PM

1. Has the desegregation emphasis of the last several years resulted in any reassignments of pupils in this district through redistricting, pairing schools, busing, or other methods?

   1 Yes

   2 No

   IF YES A. By what method?

   1 Redistricting

   2 Pairing schools

   3 Busing

   4 Other: Describe ____

   B. In what year did the desegregation plan have the greatest effect in changing the racial composition of your schools?

   0 1973

   1 1972

   2 1971

   3 1970

   4 1969

   5 1968

   6 1967

   7 1966

   8 1965

   9 earlier than 1965

   C. Did these changes affect elementary schools in your district?

   1 Yes

   2 No

   D. Did these changes affect high schools in your district?

   1 Yes

   2 No

   E. If you were here in -PICK THE YEAR FROM PART B- what kinds of district-wide programs or preparations do you feel were especially helpful? (PROBE: Why is that?)

   IF HERE: DESCRIBE IF NOT HERE: CHECK ☐

2. Can you tell me a little of the history of desegregation in our schools? How about READ THE SAMPLE SCHOOLS BELOW.

(1) ______________________________? DESCRIBE

(2) ______________________________? DESCRIBE

(3) ______________________________? DESCRIBE

(4) ______________________________? DESCRIBE

(5) ______________________________? DESCRIBE

(6) ______________________________? DESCRIBE

3A. We will be talking later with the principal(s) in our sample about educational programs in (his/their) particular school(s). Right now, I'd like to ask you briefly about district-wide or community-wide plans or programs which may have affected the students or teachers in our sample.

(1) Do you have district-wide long-range planning?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

(2) Do you have (or have you had) a community relations program?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

(3) Do you have a centrally located remedial or tutorial program?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

(4) Have you had district-wide or inter-school teacher education programs, institutes or workshops specifically related to school desegregation?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

(5) Were any special supplies, equipment, or materials made available on a district-wide basis or to more than one school within your district?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

(6) Were any specialists made available to the schools on a district-wide level?
IF YES: DESCRIBE BRIEFLY IF NO: CHECK HERE ☐

38. Now, to go back over these last few questions, did these district-wide programs you have described directly affect READ THE SAMPLE SCHOOLS BELOW

	A		B		C		D		E		F	
	LONG RANGE PLANNING		COMMUNITY RELATIONS PROGRAM		REMEDIAL OR TUTORIAL PROGRAM		TEACHER-EDUC. INSTITUTES OR WORKSHOPS		SPECIAL SUPPLIES OR EQUIPMENT		SPECIALISTS	
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
(1) ______________________	1	2	1	2	1	2	1	2	1	2	1	2
(2) ______________________	1	2	1	2	1	2	1	2	1	2	1	2
(3) ______________________	1	2	1	2	1	2	1	2	1	2	1	2
(4) ______________________	1	2	1	2	1	2	1	2	1	2	1	2
(5) ______________________	1	2	1	2	1	2	1	2	1	2	1	2
(6) ______________________	1	2	1	2	1	2	1	2	1	2	1	2

4. Of all the various educational programs and innovations you know about, which one do you think has turned out to have the most effect in raising achievement levels of the students in READ THE SAMPLE SCHOOLS BELOW. DESCRIBE (PROBE: Why is that?)

(1) ________________________________?

(2) ________________________________?

(3) ________________________________?

(4) ________________________________?

(5) ________________________________?

(6) ________________________________?

5. A. Have any previously all black schools in this district been closed or converted into vocational or special schools?

1 Yes

2 No

B. Have any previously all black schools in this district been integrated?

1 Yes

2 No

C. Are any previously all black schools still all black?

1 Yes

2 No

6. ASK ITEMS (1) - (3); IF YES, ASK B BEFORE GOING TO NEXT ITEM

	A.		B. IF YES TO A:
	YES	NO	In what year was (that/the) most recent?
(1) Has there ever been a boycott in this district because of desegregation?	1	2	
(2) Are there any segregated private schools in this community?	1	2	
(3) Was there any effort made to defeat the superintendent or school board in an election since desegregation of schools?	1	2	

7. A. Has there been a protest by whites this school year? 1 2

B. What about last school year? 1 2

8. A. Has there been a protest by blacks this school year? 1 2

B. What about last school year? 1 2

9. When was the most recent large protest by blacks here in (NAME OF COUNTY OR CITY) about a civil rights issue such as employment or education? (By large, I mean where there were demonstrations for more than one day, with arrests, or violence, or large numbers of people involved.)

0 1973
1 1972
2 1971
3 1970
4 1969
5 1968
6 1967
7 1966
8 1965 or earlier
9 Never

10. In some districts the desegregation plan requires that some students attend schools that are not nearest to their home.

A. Approximately how many, if any, white students here attend a school that is not the nearest school to their home for purposes of desegregation?

Number: ☐☐☐☐

B.. Approximately how many, if any, black students here attend a school that is not the nearest school to their home?

Number: ☐☐☐☐

11. During the 1972-73 school year what was the per pupil expenditure in average daily attendance? (include all sources of funds -- local, state, and federal)

$ ☐☐☐☐

12. Is the school board here elected at large, elected from districts, or appointed?

Elected --
- at large. 1
- from districts. . . . 2

Appointed 3

13. Is the superintendent in this district elected or appointed?

Elected 1

Appointed 2

14. Did (you/the superintendent) hold another position in this district before becoming superintendent?

Yes 1

No 2

THANK YOU VERY MUCH FOR YOUR ASSISTANCE

INTERVIEWER REMARKS TO BE
FILLED OUT IMMEDIATELY AFTER INTERVIEW

A. CODE RESPONDENT'S RACE/ETHNICITY:
- Black 1
- White 2
- Other 3

B. CODE SEX:
- Male 1
- Female 2

C. TIME ENDED: ____________________

D. TOTAL LENGTH: ________________

E. DATE OF INTERVIEW: ____________

F. SIGNATURE OF INTERVIEWER: ________________

Number ____________

Time ____________

OMB No. 51 S74003
Approval expires June 30, 1975

SURVEY QUESTIONNAIRE

5th GRADE FORM

Educational Testing Service
Princeton, New Jersey

February, 1974

NCS Trans-Optic S411A-54321

We are talking with students, teachers and principals in many places across the United States and we need your help. Your answers to the questions in this booklet are important in letting us learn how to improve schools.

We hope you enjoy thinking about these questions.

Thank you for your help.

DIRECTIONS

THE RESEARCH WORKER WILL READ EACH QUESTION AND EACH POSSIBLE ANSWER. MARK YOUR ANSWER BY FILLING IN THE CIRCLE NEXT TO THE ANSWER THAT BEST DESCRIBES YOU OR WHAT YOU THINK. MARK ONLY ONE ANSWER FOR EACH QUESTION. IF YOU WISH TO CHANGE AN ANSWER, ERASE YOUR FIRST MARK COMPLETELY. USE ONLY A No. 2 OR SOFTER LEAD PENCIL.

EXAMPLE:

Are you in the fifth grade or in high school?

● Fifth grade
② High school

YOU WOULD FILL IN THE FIRST CIRCLE, NEXT TO "FIFTH GRADE" FOR YOUR ANSWER.

⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

⓪	⓪	⓪
①	①	①
②	②	②
③	③	③
④	④	④
⑤	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨

SHADED AREA
FOR OFFICE
USE ONLY

⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

1. Are you a boy or a girl?

① Boy
② Girl

2. How old are you now?

① 9 or under
② 10
③ 11
④ 12
⑤ 13 or over

3. Which of the following best describes you?

① Black
② White
③ Spanish speaking
④ Other

4. Did you go to kindergarten?

① Yes
② No

5. Do you own a bicycle?

① Yes
② No

6. How many brothers and sisters do you have?

① One
② Two
③ Three
④ Four
⑤ Five
⑥ Six
⑦ Seven
⑧ Eight or more
⑨ None

7. Do you think you are better than most students at doing school work, about the same, or not as good as most students?

① Better
② About the same
③ Not as good

8. Does the principal of this school know you by name?

① Yes
② No

9. Is there any adult at this school you could talk to if you were upset or in trouble?

① Yes
② No

10. Have you ever had a black teacher as your regular teacher?

① Yes
② No

11. Have you ever been in a school that had a black principal?

① Yes
② No

12. Have you ever been in a school that had a black gym teacher or coach?

① Yes
② No

13. Has your mother or father visited school during this school year?

① Yes
② No

14. Are you getting more help or less help from your parents with your school work now than in the beginning of this school year?

① More help
② Less help
③ Same amount of help
④ My parents never have helped me with school work

15. Do you think your teacher likes you?

① Yes
② No

16. If you could choose the kind of school you would go to, would you pick one with --

① All white students
② All black students
③ A mixture of different kinds of students

17. In the 5th grade, have you studied anything about black people?

① Yes
② No

18. Are any of the teachers in this school unfair to white students?

① Yes
② No

19. Are your parents satisfied with the grades you get in school?

① Yes
② No

20. Do you live with both of your parents?

① Yes
② No

21. What was the earliest grade you went to school with both black and white students?

① Kindergarten
② First
③ Second
④ Third
⑤ Fourth
⑥ Fifth
⑦ Never did

22. How do you think your teacher feels about black and white students going to the same school together?

① My teacher likes it
② My teacher doesn't like it
③ It doesn't matter to my teacher

23. How about the principal of your school -- how do you think your principal feels about black and white students going to the same school together?

① The principal likes it
② The principal doesn't like it
③ It doesn't matter to the principal

24. Think of your three best friends in the 5th grade in this school. Are they all the same race as you or is one or more of a different race?

① Yes, all same race as me
② No, one or more is of a different race

25. Would you like to have more friends who are of a different race?

① Yes
② No

26. Does your family have a telephone?

① Yes
② No

27. Does your family own a dictionary?

① Yes
② No

28. Are any of the teachers in this school unfair to black students?

① Yes
② No

29. Are you afraid of most teachers of a different race from you?

① Yes
② No

30. In general, do you think that white people are smarter than black people, that black people are smarter than white people, or do you think that a person's color doesn't have anything to do with how smart he is?

① White people are smarter
② Black people are smarter
③ Color doesn't have anything to do with smartness

31. Did anyone at home read to you when you were little -- before you started school?

① Yes
② No

32. Does your family own their home?

① Yes
② No

33. Did your mother graduate from high school?

① Yes
② No

34. In the past week, did you think any of your school work or homework was fun?

① Yes
② No

35. How do you feel about school?

① I usually like school
② I usually hate school

36. At school, are you often blamed for things that just aren't your fault?

① Yes
② No

37. Do you like your teacher?

① Yes
② No

38. Is reading too hard for you now?

① Reading is too hard for me
② Reading is not too hard for me

39. Is arithmetic too hard for you now?

① Yes
② No

40. Does your teacher or someone else at school give you special help with your reading?

① Yes
② No

41. Do you think most of the rules in your classroom are fair?

① Yes
② No

42. Do you play with children of another race on a team at school?

① Yes
② No

43. Does your teacher ever assign you to work on school work with a student of another race?

① Yes
② No

44. Are you satisfied with yourself?

① Yes
② No

45. Are some kids just naturally lucky?

① Yes
② No

46. Do you think you can do things as well as most students can?

① Yes
② No

47. Do you feel like you don't really belong in this school?

① Yes
② No

48. Do you think most people are better off than you are?

① Yes
② No

49. When you take a test, do you get so nervous you can't think straight?

① Yes
② No

50. Do you think good luck is just as important for success as hard work?

① Yes
② No

51. Do you get really angry when teachers try to make you do things you don't want to do?

① Yes
② No

52. Have you been in any fights at school this school year?

① I have been in fights
② I have not been in fights

53. Does your family get a newspaper regularly?

① Yes
② No

54. Do you think it doesn't pay to try hard because things don't turn out right anyway?

① Yes
② No

55. When you make plans, are you almost sure you can make them work?

① Yes
② No

56. Does your teacher spend a lot of time getting the kids to behave?

① Yes
② No

57. Would you say you are very happy, pretty happy, or not too happy these days?

① Very happy
② Pretty happy
③ Not too happy

58. Do you think you will go to college?

① Yes
② No

59. Were you a student at this school one year ago?

① Yes
② No

60. How do you usually get to school?

① Walk or bicycle
② School bus
③ Car
④ Some other way

THANK YOU FOR THE TIME AND HELP

YOU HAVE GIVEN TO THIS STUDY.

DO NOT
MARK
ON THIS
PAGE

SURVEY TEST OF EDUCATIONAL ACHIEVEMENT

5th GRADE FORM

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Number ____________

Time ____________

OMB No. 51-S74003
Approval expires June 30, 1975

SURVEY QUESTIONNAIRE

10th GRADE FORM

Educational Testing Service
Princeton, New Jersey

February, 1974

We are talking with students, teachers, and principals in many places across the United States and we need your help. Your answers to the questions in this booklet are important in letting us learn how to improve schools.

We hope you enjoy thinking about these questions.

Thank you for your help.

DIRECTIONS

READ EACH QUESTION CAREFULLY. MARK YOUR ANSWER BY FILLING IN THE CIRCLE NEXT TO THE ANSWER THAT BEST DESCRIBES YOU OR WHAT YOU THINK. MARK ONLY ONE ANSWER FOR EACH QUESTION. IF YOU WISH TO CHANGE AN ANSWER, ERASE YOUR FIRST MARK COMPLETELY. USE ONLY A No. 2, OR SOFTER, LEAD PENCIL.

EXAMPLE:

Are you in the fifth grade or in high school?
① Fifth grade
● High school

YOU WOULD FILL IN THE CIRCLE NEXT TO "HIGH SCHOOL" FOR YOUR ANSWER.

NCS Trans Optic S411B 54321

1. What grade or year of school are you in now?

① 9th Grade (Freshman)
② 10th Grade (Sophomore or Freshman)
③ 11th Grade (Junior or Sophomore)
④ 12th Grade (Senior)

2. Are you a male or a female?

① Male
② Female

3. How old are you?

① 14 or under
② 15
③ 16
④ 17
⑤ 18 or over

4. Which of the following best describes you?

① Black
② White
③ Spanish speaking
④ Other

5. How much education does your mother have? (If you don't know, it's all right to guess.)

① Did not go to high school
② Went to high school but didn't graduate
③ Graduated from high school
④ Attended college
⑤ Graduated from college

6. Do you live with both of your parents?

① Yes
② No

7. How many brothers and sisters do you have?

① One
② Two
③ Three
④ Four
⑤ Five
⑥ Six
⑦ Seven
⑧ Eight or more
⑨ None

8. Does your family get a newspaper regularly?
① Yes
② No

9. Does your family own their home?

① Yes
② No

10. Are you a member of any school clubs or sports teams?

① Yes
② No

11. Which one of the following best describes the program or curriculum you are enrolled in?

① Advanced or special college preparatory
② College preparatory
③ Business
④ Vocational
⑤ Work study
⑥ General
⑦ Other
⑧ Don't know

⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
①	①	①	①	①	①	①	①	①
②	②	②	②	②	②	②	②	②
③	③	③	③	③	③	③	③	③
④	④	④	④	④	④	④	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

⓪	⓪	⓪
①	①	①
②	②	②
③	③	③
④	④	④
⑤	⑤	⑤
⑥	⑥	⑥
⑦	⑦	⑦
⑧	⑧	⑧
⑨	⑨	⑨

SHADED AREA
FOR OFFICE
USE ONLY

⓪	⓪	⓪	⓪	⓪	⓪	⓪	⓪
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⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧
⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨

12. Did you enter that program by your own choice, were you advised to enter it by teachers or counselors, or were you assigned to it?

① My own choice
② Advised by counselors or teachers
③ Assigned
④ Don't know

13. During this school year, have you ever talked with a counselor?

① Yes
② No
③ Don't have a counselor

14. Think about most of the work you have to do in school. Is it too hard, too easy, or just about right?

① Too hard
② Too easy
③ Just about right

15. How do your parents feel about the grades you get in school?

① Very satisfied
② Somewhat satisfied
③ Somewhat dissatisfied
④ Very dissatisfied
⑤ I don't know

16. Forget for a moment how teachers grade your school work. How do you rate yourself in school ability compared with those in your class at school?

① I am one of the best
② I am above average
③ I am average
④ I am below average
⑤ I am one of the poorest

17. Do you think you have the ability to complete college?

① Definitely yes
② Probably yes
③ Probably no
④ Definitely no
⑤ Not sure either way

18. How much time do you usually spend doing homework after school?

① None, or almost none
② Less than ½ hour a day
③ About ½ hour a day
④ About 1 hour a day
⑤ About 2 hours a day or more

19. In the past week, did you do any school work or homework that was interesting?

① Yes
② No

20. Have either of your parents come to school this year for PTA, parents' days, or for parent conferences?

① Yes
② No

21. When a teacher says that she is going to give the class a test, do you become afraid that you will do poor work?

① Yes
② No

22. At school, are you often blamed for things that just aren't your fault?

① Yes
② No

23. Was the elementary school you went to for the longest time —

① All white
② Mostly white
③ Mostly black
④ All black
⑤ Other

24. Was the junior high school you went to for the longest time —

① All white
② Mostly white
③ Mostly black
④ All black
⑤ Other
⑥ Didn't go to junior high

25. Have you ever had a black teacher as your regular teacher?

① Yes, in this school
② Yes, in another school
③ No

26. Have you ever been in a school that had a black principal?

① Yes, in this school
② Yes, in another school
③ No

27. Have you ever been in a school that had a black physical education teacher or coach?

① Yes, in this school
② Yes, in another school
③ No

28. How do you think most of your teachers feel about blacks and whites going to the same school together?

① They like it
② They don't like it
③ It doesn't matter to them
④ Don't know

29. How do you think your principal feels about blacks and whites going to the same school together?

① The principal likes it
② The principal doesn't like it
③ It doesn't matter to the principal
④ Don't know

30. Think for a moment about the three students you talk with most often at this school. Are they the same race as you?

① Yes, all same race as me
② No, one or more is from another race

31. Have you ever called a student of a different race on the phone?

① Yes
② No

32. This school year, have you helped a student from another race with school work?

① Yes
② No

33. This school year, have you asked a student from another race to help you with your homework?

① Yes
② No

34. If you could choose the kind of school you would go to, would you pick one with:

① All white students
② All black students
③ A mixture of different kinds of students
④ Other

35. Do you think your friends would think badly of you if you went someplace after school with a student of a different race?

① Yes
② No

36. Would you like to have more friends who are of a different race?

① Yes
② No

How likely is it that a black student or a white student will participate in the following activities?

More likely for a white student
More likely for a black student
Black students and white students just as likely
There is no such activity in this school

37. ① ② ③ Ⓝ Play on the football team
38. ① ② ③ Ⓝ Play on the chess team
39. ① ② ③ Ⓝ Give own ideas in class
40. ① ② ③ Ⓝ Serve on a school committee
41. ① ② ③ Ⓝ Be a cheerleader
42. ① ② ③ Ⓝ Win a scholarship
43. ① ② ③ Ⓝ Belong to the scholarship club
44. ① ② ③ Ⓝ Play in the band
45. ① ② ③ Ⓝ Play in the orchestra
46. ① ② ③ Ⓝ Be in the school government
47. ① ② ③ Ⓝ Take leading roles in a school play
48. ① ② ③ Ⓝ Take an advanced math class
49. ① ② ③ Ⓝ Take auto mechanics
50. ① ② ③ Ⓝ Take a foreign language
51. ① ② ③ Ⓝ Take home economics
52. ① ② ③ Ⓝ Take typing
53. ① ② ③ Ⓝ Give a speech in an assembly
54. ① ② ③ Ⓝ Sing in a glee club or choir
55. ① ② ③ Ⓝ Play on the basketball team

Here is a list of things that have happened in some schools. Please indicate whether or not each of these has happened at your school this school year.

Yes No

56. ① ② White students complaining that favoritism is being shown to black students.
57. ① ② Black students complaining that favoritism is being shown to white students.
58. ① ② Tensions have made it hard for everyone.

59. Are any of the teachers in this school unfair to black students?

① Yes
② No

60. If you have a bi-racial student committee in your school, how effective has the committee been in solving problems that came up because different races are going to the same school?

① No such committee
② Effective; it has helped
③ Somewhat effective; it has helped a small amount
④ It hasn't really accomplished anything
⑤ It has done as much harm as it has done good

61. How uncomfortable do you feel around students of a different race?

① Generally very uncomfortable
② Generally somewhat uncomfortable
③ Occasionally somewhat uncomfortable
④ Not at all uncomfortable

62. How often do you have class discussions about intergroup relations?

① About once a week or more often
② About once a month
③ Every few months
④ No such discussions so far

63. In general, do you think that white people are smarter than black people, that black people are smarter than white people, or do you think that a person's color doesn't have anything to do with how smart he is?

① White people are smarter
② Black people are smarter
③ Color doesn't have anything to do with smartness

64. The way things are going between blacks and whites in this school, do you think things will be better or worse next year?

① Better
② Same
③ Worse
④ School does not have both black and white students

65. Are any of the teachers in this school unfair to white students?

① Yes
② No

Think of the one adult you like best in this school. Now answer three questions about this person.

66. First, are you thinking of a man or woman?

① Man
② Woman

67. Second, what job does the adult you like best have?

① A regular teacher
② An assistant to a teacher
③ A counselor
④ The principal
⑤ Assistant principal
⑥ A guard or policeman
⑦ Some other job

68. Third, is your favorite adult white or black?

① White
② Black
③ Other

69. Have you discussed women's liberation in any of your classes this school year?

① Yes
② No

70. Have you discussed the Arab-Israeli war in any of your classes this school year?

① Yes
② No

71. Has any adult here at school ever told you, personally, not to quit high school?

① Yes
② No

72. Has any adult here at school ever told you, personally, that you should go to college?

① Yes
② No

73. Which one of the following was a scientist?

① Booker T. Washington
② George Washington Carver
③ Paul Lawrence Dunbar

74. Do you think most of the rules in this school are fair?

① Yes
② No

75. Is there any adult at this school you could talk to if you were upset or in trouble?

① Yes
② No

76. Have you been in any fights at school this school year?

① Yes
② No

77. In the past year, were you ever sent to the office because someone thought you were breaking some school rule?

① Yes, only once
② Yes, two or more times
③ No

78. During this school year, did you ever stay away from school just because you didn't want to come?

① Never
② Yes, for 1 or 2 days
③ Yes, for 3 to 6 days
④ Yes, for 7 to 15 days
⑤ Yes, for 16 or more days

In general, do you tend to agree or disagree with each of the following?

Agree Disagree

79. ① ② When bad things are going to happen, they just are going to happen no matter what you try to do to stop them.
80. ① ② On the whole, I am satisfied with myself.
81. ① ② Good luck is just as important for success as hard work is.
82. ① ② I feel I do not have much to be proud of.
83. ① ② Some kids are just naturally lucky.
84. ① ② I feel like I don't really belong in this school.
85. ① ② When I make plans, I am almost sure I can make them work.
86. ① ② Most people are better off than I am.
87. ① ② Most of the time it doesn't pay to try hard because things never turn out right anyway.

88. Everything considered, are you very happy, pretty happy, or not too happy these days?

① Very happy
② Pretty happy
③ Not too happy

89. Do you like the principal of this school?

① Yes
② No

90. Do you think you will go to college?

① Yes
② No

91. In the morning, are you usually glad to go to school?

① Yes
② No

92. When you get punished at school, does it usually seem it's for no good reason at all?

① Yes
② No

93. Do you usually hate school?

① Yes
② No

94. Were you a student at this school one year ago?

① Yes
② No

95. How do you usually get to school (please mark only one)?

① Walk or bicycle
② School bus
③ Car
④ Some other way

96. How often have you played with a student of another race on a team at school?

① Very often
② Often
③ Sometimes
④ Seldom
⑤ Never

In general, how much influence do you think the following groups of persons have in this school? For each of these groups in your school, please rate their actual influence over the way your school is run. (Please fill in the circle you feel is most appropriate for each group or person.)

	Little or no influence	Some influence	Moderate influence	Considerable influence	A great deal of influence	
97.	①	②	③	④	⑤	The school board
98.	①	②	③	④	⑤	The superintendent
99.	①	②	③	④	⑤	The principal
100.	①	②	③	④	⑤	The assistant principal
101.	①	②	③	④	⑤	Teachers
102.	①	②	③	④	⑤	You, yourself
103.	①	②	③	④	⑤	Students
104.	①	②	③	④	⑤	Parents

105. How often has your teacher assigned you to work on schoolwork with a student of another race?

① Very often
② Often
③ Sometimes
④ Seldom
⑤ Never

106. A black person couldn't be principal of this high school.

① Strongly agree
② Agree
③ Disagree
④ Strongly disagree

107. Is it easy to find books about famous black people an books about famous white people in your library?

① Yes, it is easy to find books about both famous black people and famous white people.
② It is only easy to find books about famous black people.
③ It is only easy to find books about famous white people.
④ It is not easy to find any books in our library.

108. What kinds of work do your parents do? Look over the list and check the occupation of your mother under the column headed "MOTHER" and the occupation of your father under the column headed "FATHER". If you do not have either a mother or a father, but there is someone who takes either or both of their place(s) (such as a step-parent, aunt or uncle, guardian), answer about this person. If you do not have either a mother or a father and no other person is taking either of their places, leave the column blank.

MOTHER	FATHER
①	① Foreman: such as factory foreman, mine foreman.
②	② Craftsman or "Skilled" Worker: such as baker, boilerman, bricklayer, carpenter, electrician, engraver, locomotive engineer, machinist, mechanic, plasterer, plumber, printer, roofer, sheet metal worker, stonecutter, tailor, tool and die maker, upholsterer.
③	③ Operator or "Semiskilled" Worker: such as apprentice, assembler, bus driver, delivery man, factory machine operator, miner, packer, truck driver, weaver, welder.
④	④ Workman or Laborer: such as car washer, fisherman, gardener, gas station attendant, laborer, longshoreman, lumberman, warehouseman.
⑤	⑤ Household Worker in Private Home: such as cook, housekeeper, maid
⑥	⑥ Personal Service Worker: such as barber, bartender, elevator operator, hairdresser, hospital attendant, hotel maid, janitor, restaurant cook, usher, waiter.
⑦	⑦ Fireman, Guard or Policeman: such as detective, fireman, guard, policeman, sheriff, watchman
⑧	⑧ Professional: such as accountant, actor, architect, artist, athlete, dentist, doctor, druggist, engineer, entertainer, funeral director, lawyer, librarian, minister, musician, nurse, reporter, scientist, social worker, teacher, veterinarian.
⑨	⑨ Technician: such as dental technician, designer, dietitian, draftsman, medical technician, photographer, radio operator, surveyor.
⑩	⑩ Farmer: such as farmer, rancher, sharecropper, tenant farmer.
⑪	⑪ Farm Worker: such as farm foreman, farm laborer, migrant worker.
⑫	⑫ Business Owner: such as contractor, restaurant owner, store owner, wholesaler.
⑬	⑬ Manager or Official: such as buyer in store, executive in large company, government official, office manager, sales manager, store manager.
⑭	⑭ Office Worker: such as bank teller, bookkeeper, cashier, dispatcher, messenger, office clerk, secretary, shipping clerk, telephone operator, ticket agent, typist.
⑮	⑮ Salesman: such as demonstrator, insurance salesman, real estate salesman, sales clerk in store.
⑯	⑯ Housewife.
⑰	⑰ Retired.
⑱	⑱ Unemployed.
⑲	⑲ I don't know.

THANK YOU FOR THE TIME AND HELP YOU HAVE GIVEN TO THIS STUDY.

SURVEY TEST OF EDUCATIONAL ACHIEVEMENT

10th GRADE FORM

PART I READING

EXAMPLES
1 Ⓐ Ⓑ Ⓒ Ⓓ
2 Ⓐ Ⓑ Ⓒ Ⓓ

3 Ⓐ Ⓑ Ⓒ Ⓓ
4 Ⓐ Ⓑ Ⓒ Ⓓ
5 Ⓐ Ⓑ Ⓒ Ⓓ
6 Ⓐ Ⓑ Ⓒ Ⓓ

7 Ⓐ Ⓑ Ⓒ Ⓓ
8 Ⓐ Ⓑ Ⓒ Ⓓ
9 Ⓐ Ⓑ Ⓒ Ⓓ

10 Ⓐ Ⓑ Ⓒ Ⓓ
11 Ⓐ Ⓑ Ⓒ Ⓓ
12 Ⓐ Ⓑ Ⓒ Ⓓ

PART II MECHANICS OF WRITING

EXAMPLES
13 Ⓐ Ⓑ Ⓒ Ⓓ
14 Ⓐ Ⓑ Ⓒ Ⓓ
15 Ⓐ Ⓑ Ⓒ Ⓓ

16 Ⓐ Ⓑ Ⓒ Ⓓ
17 Ⓐ Ⓑ Ⓒ Ⓓ
18 Ⓐ Ⓑ Ⓒ Ⓓ
19 Ⓐ Ⓑ Ⓒ Ⓓ
20 Ⓐ Ⓑ Ⓒ Ⓓ

21 Ⓐ Ⓑ Ⓒ Ⓓ
22 Ⓐ Ⓑ Ⓒ Ⓓ
23 Ⓐ Ⓑ Ⓒ Ⓓ
24 Ⓐ Ⓑ Ⓒ Ⓓ
25 Ⓐ Ⓑ Ⓒ Ⓓ

26 Ⓐ Ⓑ Ⓒ Ⓓ
27 Ⓐ Ⓑ Ⓒ Ⓓ
28 Ⓐ Ⓑ Ⓒ Ⓓ
29 Ⓐ Ⓑ Ⓒ Ⓓ
30 Ⓐ Ⓑ Ⓒ Ⓓ

PART III MATHEMATICS COMPUTATION

EXAMPLE
31 Ⓐ Ⓑ Ⓒ Ⓓ

32 Ⓐ Ⓑ Ⓒ Ⓓ
33 Ⓐ Ⓑ Ⓒ Ⓓ
34 Ⓐ Ⓑ Ⓒ Ⓓ
35 Ⓐ Ⓑ Ⓒ Ⓓ

36 Ⓐ Ⓑ Ⓒ Ⓓ
37 Ⓐ Ⓑ Ⓒ Ⓓ
38 Ⓐ Ⓑ Ⓒ Ⓓ
39 Ⓐ Ⓑ Ⓒ Ⓓ

40 Ⓐ Ⓑ Ⓒ Ⓓ
41 Ⓐ Ⓑ Ⓒ Ⓓ
42 Ⓐ Ⓑ Ⓒ Ⓓ
43 Ⓐ Ⓑ Ⓒ Ⓓ

PART IV MATHEMATICS - BASIC CONCEPTS

EXAMPLE
44 Ⓐ Ⓑ Ⓒ Ⓓ

45 Ⓐ Ⓑ Ⓒ Ⓓ
46 Ⓐ Ⓑ Ⓒ Ⓓ
47 Ⓐ Ⓑ Ⓒ Ⓓ
48 Ⓐ Ⓑ Ⓒ Ⓓ

49 Ⓐ Ⓑ Ⓒ Ⓓ
50 Ⓐ Ⓑ Ⓒ Ⓓ
51 Ⓐ Ⓑ Ⓒ Ⓓ

52 Ⓐ Ⓑ Ⓒ Ⓓ
53 Ⓐ Ⓑ Ⓒ Ⓓ
54 Ⓐ Ⓑ Ⓒ Ⓓ

PART V SCIENCE

EXAMPLE
55 Ⓐ Ⓑ Ⓒ Ⓓ

56 Ⓐ Ⓑ Ⓒ Ⓓ
57 Ⓐ Ⓑ Ⓒ Ⓓ
58 Ⓐ Ⓑ Ⓒ Ⓓ
59 Ⓐ Ⓑ Ⓒ Ⓓ

60 Ⓐ Ⓑ Ⓒ Ⓓ
61 Ⓐ Ⓑ Ⓒ Ⓓ
62 Ⓐ Ⓑ Ⓒ Ⓓ

63 Ⓐ Ⓑ Ⓒ Ⓓ
64 Ⓐ Ⓑ Ⓒ Ⓓ
65 Ⓐ Ⓑ Ⓒ Ⓓ

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APPENDIX B

PARTIAL CORRELATIONS BETWEEN SCHOOL PROCESS VARIABLES AND STUDENT RACE RELATIONS AND ACHIEVEMENT OUTCOMES

Page

Fifth Grade B-2

Tenth Grade B-15

Table B-1

Fifth Grade

Partial Correlations[1] between School Process Variables and Student Race Relations and Achievement Outcomes

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-1 Teachers Racial Attitudes				.33**	.19	.00	.21	-.04	-.05
TQ025	.69	Black students better off in mixed schools	high = yes	.10	.17	-.04	.15	-.04	-.14
26	.83	White students better off in mixed schools	high = yes	.25*	.11	.04	.10	-.01	-.03
62	.63	The amount of prejudice is exaggerated	low = agreement	.00	.02	.01	.00	-.07	-.06
63	-.84	Like to live in integrated neighborhood	low = agreement	-.36**	-.32**	-.18	-.25*	.05	.04
64	-.47	Civil Rights: More good than harm	low = agreement	-.23*	-.13	.12	-.16	-.06	-.02
65	.80	Blacks and whites should not intermarry	low = agreement	.23*	.05	.10	.19	-.08	-.08
66	.83	Black failure due to white restriction	high = agreement	.33**	.20	.08	.10	-.06	.14
T-2 Support for Integration				-.32**	-.14	-.16	-.14	-.09	-.07
TQ187	.75	Students like desegregation	high = no	-.38**	-.29**	-.23*	-.20	.01	.00
188	.89	Principal likes desegregation	high = no	-.34**	-.21	-.26*	-.15	-.10	-.10
189	.86	Superintendent likes desegregation	high = no	-.28*	-.24*	-.19	-.18	-.08	-.03
190	.89	White teachers like desegregation	high = no	-.42**	-.29**	-.21	-.22*	-.09	-.07
191	.89	Black teachers like desegregation	high = no	-.27*	-.25*	-.22*	-.31**	-.11	-.19
T-3 Absence of Tension				.25*	.16	.01	-.03	.14	.14
TQ165	-.82	Evaluate desegregation	low = no problems	-.25*	-.20	-.01	-.08	-.10	-.04
166	.60	More fighting since desegregation	high = no	.28*	.18	.04	.06	.09	.14
172	.67	Tenseness between black and white students	high = no	.14	.03	.01	-.06	.11	.11
047	.61	The school atmosphere is tense	high = no	.00	.09	.00	-.11	-.15	-.06
176	.58	White discipline problems	high = low %	.33**	.29**	.29**	.23*	.15	.19
177	.71	Black discipline problems	high = low %	.42**	.25*	.25*	.18	.13	.14

[1] Black SES, White SES, percent black, percent urban, and north/south location have been partialed out

* p<.05 ** p<.01

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-4 Teachers' Job Attitudes				.20	-.15	.25*	.04	.10	.18
TQ041	.69	Just too much work to do	high = no	.17	-.08	.21	-.09	.01	.16
43	.40	Range of ability makes teaching hard	high = no	.19	.03	.23*	.06	.07	-.02
44	.61	No one to share responsibility	high = no	.10	-.18	-.06	.06	.03	-.05
46	.65	Don't have the training needed	high = no	.19	.07	.23*	.08	-.07	.06
T-5 Interpersonal Relations with Students				.14	.35**	.10	.22*	-.21	-.05
TQ253	.81	How do you and black parents get along	high = warm, open	.25*	.29**	.26*	.17	-.18	-.23*
254	.82	How do you and white parents get along	high = warm, open	.19	.21	.29**	.15	-.15	-.11
255	.87	How do you and black students get along	high = warm, open	.10	.29**	.09	.24*	-.22*	-.04
256	.85	How do you and white students get along	high = warm, open	.05	.24*	.09	.24*	-.20	.02
261	.68	How do black and white students get along	high = warm, open	.15	.23*	.13	.18	.00	.20
T-6 Interpersonal Relations among Teachers				.08	.06	-.31**	.03	-.39**	-.29*
TQ251	.87	How do you and black teachers get along	high = warm, open	.19	.08	-.16	.06	-.41**	-.31**
252	.77	How do you and white teachers get along	high = warm, open	-.22*	-.17	-.19	-.14	-.27*	-.23*
260	.92	How do black and white teachers get along	high = warm, open	.09	.10	-.26	.06	-.39**	-.29**
T-7 Interpersonal Relations of Principal				-.25*	.16	-.15	-.06	-.17	-.06
TQ250	.86	How do you and the principal get along	high = warm, open	-.20	.02	-.02	-.01	-.40**	-.36**
257	.88	How do the principal and teachers get along	high = warm, open	-.16	.09	-.12	-.05	-.30**	-.21
258	.91	How do principal & black students get along	high = warm, open	.02	.09	.05	-.03	-.09	-.11
259	.92	How do principal & white students get along	high = warm, open	.01	.19	.06	.02	-.13	-.08

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-8 School Autonomy				-.12	.26*	.07	-.12	-.29*	-.23*
TQ262	-.62	Influence of school board	high = much	.01	-.03	-.20	.03	.01	-.06
263	-.63	Influence of superintendent	high = much	.04	.07	-.15	.05	.17	-.05
266	.68	Influence of black teachers	high = much	.00	.33**	-.01	.14	-.20	-.04
267	.83	Influence of white teachers	high = much	-.07	.16	-.03	.01	-.30*	-.21
269	.83	Influence of black students	high = much	-.16	-.10	.06	-.14	-.15	-.29**
270	.82	Influence of white students	high = much	-.11	.02	.08	-.13	-.31**	-.33**
271	.72	Influence of black parents	high = much	-.02	.10	.12	-.06	.01	-.13
272	.55	Influence of white parents	high = much	-.01	.16	.03	-.09	-.11	-.04
T-9 Teacher Autonomy				-.08	.23*	.01	-.14	-.21	.17
TQ242	.55	Choice of jobs in this school	high = a lot	.21	.28*	.25*	.13	-.04	.05
244	.38	Choice of kinds of students	high = a lot	-.11	-.07	-.06	-.14	-.28*	-.21
245	.78	Choice of textbooks	high = a lot	-.03	.14	-.08	-.07	-.25*	.17
247	.68	Choice of own routine	high = a lot	-.16	-.05	-.01	-.17	-.02	.17
248	.74	Choice of own teaching style	high = a lot	-.01	.01	.11	-.15	-.15	.14
268	.68	Your influence	high = much	-.04	.20	-.06	-.05	-.28*	-.13
T-10 Inequality of Black and White Students				-.14	-.05	.08	-.02	-.02	.12
TQ273	.35	Unequal support for deseg: B & W teachers	high = bad	-.23*	-.09	-.02	.10	-.12	.00
274	.39	Unequal friendliness: B & W teachers	high = bad	-.31**	-.10	.08	-.07	.11	.01
276	.03	Unequal friendliness: B & W students	high = bad	-.18	-.14	-.13	-.28*	.02	.16
277	.68	Unequal friendliness: Prnts. B & W students	high = bad	-.08	-.04	-.01	-.02	.06	.11
278	.75	Unequal influence: B & W teachers	high = bad	.10	.07	.22*	.04	.12	.07

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-10 Continued									
TQ279	.75	Unequal influence: B & W students	high = bad	.08	-.02	.15	.10	.10	.06
280	.72	Unequal influence: B & W parents	high = bad	-.01	.09	-.10	-.05	-.18	.11
281	.22	Unequal school mix for B & W students	high = bad	-.21	-.09	-.05	.00	.02	-.13
282	.39	Unequal black and white discipline problems	high = bad	-.30**	-.15	-.10	-.08	.01	.11
283	.48	Unequal B & W grade level performance	high = bad	-.14	-.04	-.06	-.01	-.15	.13
284	.62	Unequal teacher fairness	high = bad	-.02	.22*	.07	-.01	-.12	.08
T-11 Perceived Racial Differences				-.19	-.04	.01	.06	-.04	.21
TQ218	.60	Black and white boys: Activity level	low = no difference	-.11	-.10	.20	.04	-.04	.23*
219	.77	Read better	low = no difference	-.16	-.07	-.04	-.05	-.08	.10
220	.55	Musical	low = no difference	.04	.20	.07	.03	-.20	.06
221	.68	Athletic	low = no difference	-.23*	.03	-.07	.14	-.01	.18
222	.72	Adjusted to school	low = no difference	-.29**	-.14	-.09	.00	-.05	.11
223	.83	Quicker to catch on	low = no difference	-.32**	-.14	-.17	-.09	.03	.08
224	.78	More attentive	low = no difference	-.24*	-.18	-.08	-.11	.05	.17
225	.64	Like to learn better	low = no difference	-.27*	-.07	-.02	-.13	-.05	.06
226	.76	Get along better	low = no difference	-.14	.09	.01	.05	.06	.13
227	.80	Achievement oriented	low = no difference	-.13	-.09	-.01	.02	.05	.23
228	.76	Cause more trouble	low = no difference	-.27*	-.10	.01	.00	.07	.12
229	.80	Need more help	low = uo difference	-.19	-.09	.03	-.06	-.05	.10
230	.75	Black and white girls: Activity level	low = po difference	-.15	-.07	.10	.00	-.04	.07
231	.82	Read better	low = no difference	-.09	.04	-.08	.03	.02	.11
232	.66	Musical	low = no difference	-.07	.11	.08	-.02	-.21	-.06

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-11 Continued									
TQ233	.73	Athletic	low = no difference	-.14	.01	-.04	.19	.12	.25*
234	.77	Adjusted to school	low = no difference	-.16	.00	-.15	-.01	-.08	.19
235	.86	Quicker to catch on	low = no difference	-.17	-.03	-.07	-.03	.07	.08
236	.82	More attentive	low = no difference	-.22*	-.18	-.03	-.10	-.01	.11
237	.66	Like to learn better	low = no difference	-.12	.05	.08	-.03	-.13	-.01
238	.75	Get along better	low = no difference	-.22*	.06	-.04	.10	.04	.08
239	.82	Achievement oriented	low = no difference	-.11	.01	-.03	.03	.00	.26*
240	.62	Cause more trouble	low = no difference	-.26*	-.09	-.14	-.08	-.13	-.12
241	.79	Need more help	low = no difference	-.10	-.05	.05	-.06	-.08	-.01
T-12 Desegregation Process				-.17	-.12	.05	.03	.01	.24*
TQ167	.10	Minority groups demand ethnic studies	low = yes	-.04	-.06	-.22*	-.11	-.14	-.01
168	.66	All students learning more	low = yes	-.26*	-.29**	.00	-.19	.00	-.03
170	.71	White students becoming less prejudiced	low = yes	-.09	-.09	-.15	-.06	.04	.35**
171	.86	New educational programs improving schools	low = yes	-.28*	-.13	-.05	.00	.01	.19
T-13 Replaced									
T-14 Teacher Training				.21	.09	.04	.09	.10	.05
TQ028	.95	Amount of in-service training	high = much	.18	.08	.09	.10	.14	.05
173	.90	Had training this year	high = yes	.23*	.17	.14	.26*	.13	.13
174	-.16	Evaluation of training	low = valuable	-.09	-.12	-.03	.11	.26*	.20
175	.27	Training changed thinking	high = yes	.03	.01	.02	-.14	.04	-.08

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-15 Achievement Evaluation				.26*	.11	.33**	.06	.25*	.23*
TQ042	.80	Many students won't try to learn	low = yes	.35**	.20	.27*	.13	.02	.15
178	-.75	Number of white students at grade level	low = many	-.30**	-.29**	-.31**	-.21	-.05	-.25*
179	-.78	Number of black students at grade level	low = many	-.33**	-.27*	-.33**	-.19	-.21	-.12
204	.54	Achievement grouping of classrooms	low = helpful	.02	-.09	.15	.08	.28*	.27*
205	.59	Achievement grouping within classrooms	low = helpful	-.10	-.07	.15	-.03	.22*	-.03
T-16 Race Relations Practices				-.18	-.21	-.43**	-.37**	-.15	.00
TQ038	-.84	Projects on intergroup problems	low = no	.13	.19	.26*	.26*	.02	.03
39	.82	Class discussion on race	low = often	-.10	-.15	-.28*	-.22*	-.23*	-.23*
56	-.51	Number of years with students of other race	high = many	.25*	.17	.35**	.29**	.10	.08
37	.59	Multi-ethnic texts	low = yes	-.06	-.10	-.13	-.16	-.06	.12
167	.54	Demand for ethnic studies	low = yes	-.04	-.06	-.22*	-.11	-.14	-.01
T-17 Evaluation of Services				-.06	.22*	-.04	.30**	-.08	.06
TQ195	.84	Helpfulness of guidance counselors	low = helpful	-.10	-.02	-.12	-.02	-.09	.23*
196	.81	Helpfulness of social workers	low = helpful	-.13	.14	-.01	.09	-.16	-.06
197	.68	Helpfulness of teacher aides	low = helpful	-.13	-.02	-.12	.07	.02	.10
T-18 Evaluation of Human-Relations Programs				-.11	-.12	.00	-.03	.05	-.09
TQ210	.61	Helpfulness of parent-teacher contact	low = helpful	-.36**	-.09	-.15	-.19	-.04	-.03
211	.84	Helpfulness of intergroup relations among S	low = helpful	-.21	-.08	-.09	-.04	.02	.01
212	.79	Helpfulness of intergroup relations among T	low = helpful	-.05	-.17	-.02	.02	.06	-.09

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-19 Evaluation of Instructional Programs				-.03	-.10	.17	.15	.17	.07
TQ198	.59	Teacher training	low = helpful	-.21	-.29**	-.21	-.13	.09	.11
199	.56	Remedial Reading	low = helpful	-.17	.07	-.03	.02	.00	.08
200	.48	Vocational training	low = helpful	.09	-.15	-.04	.04	-.01	-.14
202	.69	Underachievers' classes	low = helpful	-.11	-.06	.22*	.19	.04	-.01
203	.59	Classes for maladjusted	low = helpful	-.21	-.18	.04	-.15	.18	.06
204	.62	Achievement grouping of classes	low = helpful	.02	-.09	.15	.08	.28*	.27*
205	.71	Achievement grouping within classrooms	low = helpful	-.10	-.07	.15	-.03	.22*	-.03
209	.38	Tutoring	low = helpful	-.03	.09	-.04	.17	.00	-.03
T-20 Extra time on task				.13	.05	-.11	.09	.31*	.08
ET001	.15	Team teaching	low = yes	.23*	-.01	.26*	.06	.20	.05
03	.90	Extra time on reading	low = no	.08	.07	-.10	.08	.27*	.10
04	.91	Extra time on math	low = no	.11	.17	-.08	.18	.25*	.07
T-21 Teacher vs. Child-Centered Attitudes				-.14	-.22*	.04	-.21	-.08	-.23*
ET008	.62	Regular routine	high = agreement	.00	.03	.08	-.04	.07	-.07
09	-.56	Students work best at what they prefer	high = agreement	.03	-.02	-.04	-.09	-.02	-.10
10	.72	Sit still; pay attention	high = agreement	-.03	-.13	-.03	-.13	-.19	-.24*
11	.01	Praise is best	high = agreement	.24*	.06	.04	-.01	.04	-.04
12	-.54	Explore environment	high = agreement	.14	.20	-.08	-.01	-.13	.12
13	.73	Textbooks important	high = agreement	.06	-.08	.11	.00	-.15	-.11
14	-.29	Less structure; more discovery	high = agreement	.01	.02	-.12	-.02	.31**	.28*
15	.82	Quiet orderly classroom	high = agreement	.00	-.06	.14	-.05	.00	-.05
16	-.66	Busy active noisy classroom	high = agreement	.14	-.06	-.11	-.02	.00	.05
17	-.54	Students should express feelings	high = agreement	.17	.19	.04	.11	-.05	.18

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
T-22 Structure				-.10	-.07	.02	.03	.10	.08
ET005	.71	Students must raise hands to talk	high = no	-.07	-.06	-.06	-.03	.03	.13
22	.68	Individual instruction	high = yes	-.01	.02	-.07	-.11	.01	-.09
23	-.84	Free student movement	high = no	.06	.07	.00	-.01	-.11	-.08
24	-.77	Noise level	high = quiet	$.24^{*}$	.21	.10	.07	.08	.14
TQ249	.73	School strictness	high = easygoing	-.16	-.21	.00	-.11	.18	.06
T-23 Teaching Style				-.16	.05	.02	-.08	-.13	-.07
TQ130	.72	Warn student	high = often	$-.25^{*}$	-.07	-.21	$-.27^{*}$	-.16	-.21
131	.74	Give directions	high = often	-.17	-.04	-.01	.02	.06	.21
132	.35	Praise	high = often	.13	.17	.06	.09	.05	.06
133	.74	Scold	high = often	$-.31^{**}$	-.17	-.15	-.12	-.10	-.14
134	.50	Class discussions	high = often	.09	$.31^{**}$	.06	.23	.03	.20
S-1 Racial Contact Practices (B)				$-.23^{*}$	-.09	$-.28^{*}$	$-.28^{*}$	$-.33^{**}$	$-.25^{*}$
ES017B	.64	Studied about black people	low = yes	-.12	-.10	$-.30^{**}$	-.15	$-.30^{**}$	$-.30^{**}$
42B	.76	Racial mix at play	low = yes	-.19	-.14	$-.32^{**}$	$-.27^{*}$	$-.22^{**}$	-.15
43B	.70	Racial mix at work assignments	low = yes	-.21	-.16	-.10	$-.24^{*}$	$-.32^{**}$	$-.29^{**}$
S-2 Racial Contact Practices (W)				.03	.09	$-.43^{**}$	$-.34^{**}$	$-.38^{**}$	-.17
ES017W	.60	Studied about black people	low = yes	.00	-.05	$-.23^{*}$	-.14	$-.36^{**}$	$-.30^{**}$
42W	.78	Racial mix at play	low = yes	-.09	-.13	$-.39^{**}$	$-.39^{**}$	$-.24^{*}$	-.19
43W	.79	Racial mix at work assignments	low = yes	-.12	-.09	$-.39^{**}$	$-.44^{**}$	$-.34^{**}$	-.17

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
P-1 Principal's Racial Attitude				-.03	.09	.07	.09	.02	.04
PI221	.54	Black students better off in mixed schools	high = yes	.11	.00	.04	.05	-.07	-.14
222	.73	White students better off in mixed schools	high = yes	-.03	.04	.17	.10	-.08	-.02
223	.61	Black failure due to white restrictions	high = agreement	.03	.29**	.03	.24*	-.04	.04
224	.73	The amount of prejudice is exaggerated	low = agreement	-.08	.12	.06	-.06	.07	.06
225	-.49	Like to live in an integrated neighborhood	low = agreement	-.01	-.07	.07	-.04	.06	-.02
226	-.48	Civil Rights: more good than harm	low = agreement	.08	-.02	-.04	-.10	-.06	-.11
227	.67	Blacks and whites should not intermarry	low = agreement	.10	-.01	.11	.14	.12	.29**
P-2 Support for Integration				.07	.03	.01	.09	.13	.09
PI243	.75	Principal liking for desegregation	high = no	-.03	-.01	.02	-.04	.03	-.02
267	.75	White teachers like desegregation	high = no	.00	-.06	-.01	.03	.15	.11
268	.85	Black teachers like desegregation	high = no	-.14	-.10	-.12	.00	.16	-.04
269	.72	Your superior likes desegregation	high = no	.19	-.02	-.18	-.01	.00	-.19
270	.90	Superintendent likes desegregation	high = no	.16	-.05	.06	.07	.13	-.09
P-3 Absence of Conflict: Discipline				.00	.26*	-.05	-.08	-.09	.05
PI192	.66	Conflict between teachers and parents	high = no problem	-.05	.07	-.05	-.15	.15	.03
196	.85	Conflict between teachers and administration	high = no problem	-.12	.19	-.06	-.03	-.09	-.01
200	.78	Conflict among teachers	high = no problem	.04	.22*	.01	-.02	-.13	.04
205	.76	Conflict between teachers and students	high = no problem	.24*	.35**	.07	.09	.03	.11

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
P-4 Absence of Conflict: Racial Issues				.04	.13	.01	.12	-.05	.06
PI194	.88	Conflict between teachers and parents	low = serious problem	.08	.11	.08	.19	.11	.12
198	.83	Conflict between teachers and administration	low = serious problem	.06	.11	.04	.13	.02	.10
202	.91	Conflict among teachers	low = serious problem	.01	-.01	-.01	.05	.04	-.04
207	.27	Conflict between teachers and students	low = serious problem	-.03	.08	.01	.10	.07	.08
187	.17	Is there a contingency plan	high = no	.06	-.03	-.03	.02	.10	.09
190	.42	Had faculty meetings on racial issues	high = no	-.07	-.03	.00	.05	-.06	.04
P-5 Absence of Conflict: Ability Grouping				-.07	.06	-.05	-.12	-.16	-.14
PI193	.73	Conflict between teachers and parents	low = serious problem	-.13	-.04	-.09	-.11	-.17	-.19
197	.80	Conflict between teachers and administration	low = serious problem	-.04	-.02	.03	-.02	.15	-.03
201	.81	Conflict among teachers	low = serious problem	-.02	.05	-.09	-.14	-.19	-.12
P-6 Absence of Conflict: Instructional Change				-.10	.03	-.03	-.04	-.04	.02
PI199	.92	Conflict between teachers and administration	low = serious problem	-.06	.01	.07	.01	.05	.03
203	.92	Conflict among teachers	low = serious problem	-.06	.12	-.08	-.02	-.08	.00
P-7 Absence of Principal's Personal Conflict				-.11	.13	-.01	-.07	-.02	.05
PI209	.86	Working after school hours	low = serious problem	-.06	.12	.05	-.11	.00	.05
210	.90	Working weekends	low = serious problem	-.14	.07	-.05	.00	-.02	.03
211	.93	Receiving phone calls at home	low = serious problem	-.03	.17	.06	.02	-.03	.02
212	.30	Evening functions at school	low = serious problem	.11	.21	.02	-.11	.05	.02

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
P-8 School SES				-.27*	-.15	-.18	-.28*	-.37**	-.48**
PI164	.74	Percent disadvantaged	low = low percentage	.17	.06	.01	.21	-.12	-.34**
166	.73	Percent of free school lunches	low = low percentage	-.04	-.04	.11	.05	-.12	-.21
167	-.80	Percent parents college graduates	low = low percentage	.21	.19	.21	.29**	.19	.41**
168	.70	Percent parents not beyond high school	low = low percentage	-.10	-.05	.00	-.16	-.33**	-.29**
169	-.76	Percent parents professionals	low = low percentage	.29**	.10	.21	.24*	.25*	.40**
170	.72	Percent parents unskilled	low = low percentage	-.09	-.17	-.02	-.31**	-.24*	-.24*
171	-.79	Percent family income over $15,000	low = low percentage	.29**	.00	.32**	.24*	.44**	.36**
172	.80	Percent family income under $8,000	low = low percentage	-.01	-.09	.06	-.06	-.14	-.31**
P-9 Violent Behavior				-.07	-.20	.01	-.08	-.08	-.28*
PI229	.54	Number fights requiring treatment	low = few	.02	.03	-.06	-.12	.00	-.10
230	-.01	Number of times lockers broken into	low = few	.02	-.17	-.07	.00	-.17	-.11
231	.84	Number of student robberies	low = few	-.02	-.21	.07	-.02	.03	-.15
232	.85	Number of attacks on a teacher	low = few	-.16	-.21	-.06	-.05	-.15	-.26*
233	.19	Number of robberies of school property	low = few	.12	.02	.23*	.08	-.09	-.25*
P-10 Principal's Interpersonal Relations				-.30**	.09	-.18	-.11	-.34**	-.20
PQ125	.77	You and black teachers	high = warm, open	-.05	.13	-.06	.04	-.37**	-.18
126	.78	You and white teachers	high = warm, open	-.21	.05	-.15	-.02	-.44**	-.22*
127	.76	You and black parents	high = warm, open	-.12	.14	.00	.09	-.27*	-.12
128	.84	You and white parents	high = warm, open	-.13	.16	-.04	.05	-.22*	-.06
129	.89	You and black students	high = warm, open	-.14	.09	.03	-.01	-.27*	-.19
130	.90	You and white students	high = warm, open	-.18	.03	.00	-.06	-.29**	-.19

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
P-11 Inequality				-.16	-.19	-.26*	-.11	.05	.05
PQ133	-.10	Unequal friendliness: B & W teachers	high = bad	.21	.08	.24*	.10	.21	.08
134	.56	Unequal friendliness: B & W parents	high = bad	-.09	-.17	-.06	.00	.17	-.06
PI256	.70	Unequal attendance by B & W parents	high = bad	-.23*	-.20	-.13	-.13	.12	.08
257	.85	Unequal black & white parent visits	high = bad	-.14	-.09	-.31**	-.18	.04	.10
258	-.34	Unequal black & white parents sent for	high = bad	-.15	-.12	.17	-.12	.18	-.05
P-12 Omitted									
P-13 Principal's Job Attitude				.37**	.11	.02	-.10	-.12	.02
PI234	.72	Principal can have important effect	low = yes	.35**	.19	-.01	.03	-.09	.02
235	.72	How often do you worry about work	high = often	.11	-.10	-.03	-.23*	-.11	.01
P-14 Evaluation of Race Relations Programs				.21	.01	.04	.00	.15	.01
PQ019	.77	Minority culture courses	low = adequate	.05	-.19	-.02	-.07	.16	-.01
52	.77	Biracial advisory committee	low = adequate	-.01	.05	-.05	.09	.11	.00
P-15 Evaluation of Instructional Programs				-.01	-.04	.01	-.03	.03	.00
PQ010	.46	Teacher workshops	low = adequate	.02	.04	-.09	-.10	.10	-.13
13	.65	Remedial reading	low = adequate	.02	-.02	-.09	.06	.09	.13
16	.66	Vocational training	low = adequate	-.03	-.11	.09	.10	.10	.00
22	.76	Classrooms for underachievers	low = adequate	.00	-.05	.03	-.05	-.12	-.02
25	.26	Classrooms for maladjusted	low = adequate	.12	.01	.06	-.02	.02	-.10
28	.33	Achievement grouping	low = adequate	-.10	.06	.05	.00	-.10	.08
40	.35	Tutoring program	low = adequate	-.11	-.18	-.13	-.19	.15	.03

Table B-1 (Continued)

Fifth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude		Personal Racial Attitude		Achievement	
				Black	White	Black	White	Black	White
P-16 Evaluation of Human-Relations Programs				.02	.00	.04	-.09	.02	-.15
PQ043	.82	Parent-teacher contact program	low = adequate	-.05	.00	.01	-.14	.01	-.07
46	.86	Intergroup student relations program	low = adequate	-.05	.01	-.09	-.10	.16	-.13
49	.77	Intergroup teacher relations program	low = adequate	-.17	-.16	-.16	-.21	-.10	-.25*
P-17 Evaluation of Services				.09	.02	.15	.02	-.07	-.10
PQ001	.74	Guidance counselors adequate	low = adequate	-.03	-.08	.09	-.02	-.14	-.27*
04	.79	Home visitor adequate	low = adequate	.09	-.08	.07	-.02	-.07	-.05
07	.41	Teacher aides adequate	low = adequate	.15	.16	.22*	.18	.19	.26*

Table B-2

Tenth Grade

Partial Correlations between School Process Variables and Student Race Relations and Achievement Outcomes

I.D.	Loading	Description	Scale Direction	Black Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-1 Teachers' Racial Attitudes				.02	-.01	-.01	-.19	-.11
TQ025	.53	Black students better off in mixed schools	high = yes	.03	-.05	-.16	.07	.03
26	.84	White students better off in mixed schools	high = yes	.16	.07	.11	-.08	-.01
62	.72	The amount of prejudice is exaggerated	low = agreement	-.06	-.11	.03	-.21	-.02
63	-.85	Like to live in integrated neighborhood	low = agreement	-.05	-.02	.00	.08	.15
64	-.47	Civil Rights: More good than harm	low = agreement	.00	.15	.25*	.01	.09
65	.88	Blacks and whites should not intermarry	low = agreement	.01	.13	.15	-.19	-.10
66	.73	Black failure due to white restriction	high = agreement	.01	-.04	.06	-.25*	-.16
T-2 Support for Integration				-.11	-.07	-.07	-.07	.00
TQ187	.84	Students like desegregation	high = no	-.16	-.22	-.13	-.26*	-.02
188	.87	Principal likes desegregation	high = no	.02	-.04	-.11	.08	.02
189	.80	Superintendent likes desegregation	high = no	.07	.07	.04	.03	-.14
190	.89	White teachers like desegregation	high = no	-.08	.03	.04	-.14	.03
191	.87	Black teachers like desegregation	high = no	-.04	.07	.03	-.08	.00
T-3 Absence of Tension				.29*	.00	-.01	.15	-.11
TQ165	-.84	Evaluate desegregation	low = no problems	-.28*	.05	.02	.03	.05
166	.73	More fighting since desegregation	high = no	.30*	.11	.12	-.01	-.01
172	.81	Tenseness between black and white students	high = no	.35**	-.02	-.01	.07	-.16
47	.75	The school atmosphere is tense	high = no	.23	-.08	.12	.16	-.11
176	.59	White discipline problems	high = low %	.13	.18	.05	.28*	.02
177	.74	Black discipline problems	high = low %	.20	-.07	-.12	-.02	-.15

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-1 Teachers' Racial Attitudes				.23	.47**	.55**	.01	-.02
TQ025	.53	Black students better off in mixed schools	high = yes	.29*	.25*	.27*	.08	-.06
26	.84	White students better off in mixed schools	high = yes	.32*	.52**	.48**	.01	-.03
62	.72	The amount of prejudice is exaggerated	low = agreement	-.02	.14	.19	-.03	.16
63	-.85	Like to live in integrated neighborhood	low = agreement	-.19	-.42**	-.50**	-.04	.02
64	-.47	Civil Rights: More good than harm	low = agreement	-.17	-.27*	-.26*	.08	.21
65	.88	Blacks and whites should not intermarry	high = agreement	.11	.27*	.38**	-.09	-.01
66	.73	Black failure due to white restriction	high = agreement	.04	.18	.31*	.00	.00
T-2 Support for Integration				-.36**	-.47**	-.47**	-.07	.13
TQ187	.84	Students like desegregation	high = no	-.38**	-.53**	-.46**	-.17	.05
188	.87	Principal likes desegregation	high = no	-.13	-.28*	-.36**	.09	.26*
189	.80	Superintendent likes desegregation	high = no	-.03	-.19	-.21	.12	.10
190	.89	White teachers like desegregation	high = no	-.23	-.38**	-.36**	-.07	.05
191	.87	Black teachers like desegregation	high = no	-.30**	-.49**	-.33**	-.11	.03
T-3 Absence of Tension				.43**	.39**	.36**	.16	.06
TQ165	-.84	Evaluate desegregation	low = no problems	-.46**	-.28*	-.21	.00	.09
166	.73	More fighting since desegregation	high = no	.33**	.31*	.36**	.08	.01
172	.81	Tenseness between black and white students	high = no	.32*	.34**	.27*	.17	.13
47	.75	The school atmosphere is tense	high = no	.28*	.40**	.28*	.15	.13
176	.59	White discipline problems	high = low %	.17	.04	.20	.23	.26*
177	.74	Black discipline problems	high = low %	.27*	.01	.12	-.12	-.13

Table B-2 (Continued)

Tenth Grade

				Black Student Outcomes				
I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-4 Teachers' Job Attitudes				-.09	-.23	-.24	-.06	-.04
TQ041	.66	Just too much work to do	high = no	-.09	-.22	-.07	-.08	-.06
43	.62	Range of ability makes teaching hard	high = no	.05	-.16	-.25*	-.14	.01
44	.35	No one to share responsibility	high = no	.13	.03	.14	.21	.05
46	.60	Don't have the training needed	high = no	-.02	-.04	-.13	.06	-.02
T-5 Interpersonal Relations with Students				.14	-.08	-.03	.41**	.03
TQ253	.82	How do you and black parents get along	high = warm, open	.10	.03	.01	.31*	-.01
254	.82	How do you and white parents get along	high = warm, open	-.05	-.12	.00	.27*	.12
255	.82	How do you and black students get along	high = warm, open	.03	.02	-.10	.37**	.07
256	.83	How do you and white students get along	high = warm, open	-.07	-.18	-.15	.33**	-.07
261	.38	How do black and white students get along	high = warm, open	.28*	-.03	.16	.17	-.05
T-6 Interpersonal Relations among Teachers				-.09	-.26*	-.06	.14	.00
TQ251	.60	How do you and black teachers get along	high = warm, open	-.10	-.18	-.19	-.03	-.06
252	.85	How do you and white teachers get along	high = warm, open	.04	-.23	-.04	.12	.02
260	.87	How do black and white teachers get along	high = warm, open	-.12	-.20	.03	.10	.05
T-7 Interpersonal Relations of Principal				.00	-.22	-.24	.14	-.07
TQ250	.78	How do you and the principal get along	high = warm, open	.06	-.11	-.15	.05	-.17
257	.84	How do the principal and teachers get along	high = warm, open	.10	-.17	-.15	.20	-.13
258	.85	How do principal & black students get along	high = warm, open	-.09	-.24	-.19	.07	.01
259	.88	How do principal & white students get along	high = warm, open	-.10	-.30*	-.28*	.07	.05

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-4 Teachers' Job Attitudes				.05	-.18	-.07	-.20	-.37**
TQ041	.66	Just too much work to do	high = no	.01	-.24	-.17	-.15	-.33**
43	.62	Range of ability makes teaching hard	high = no	.11	.02	.03	-.26*	-.30*
44	.35	No one to share responsibility	high = no	.14	.19	.19	.26*	.07
46	.60	Don't have the training needed	high = no	-.15	-.16	-.17	-.12	-.09
T-5 Interpersonal Relations with Students				.31*	.20	.24	-.09	-.30*
TQ253	.82	How do you and black parents get along	high = warm, open	.22	.11	.25	-.15	-.31*
254	.82	How do you and white parents get along	high = warm, open	.06	-.03	.07	-.21	-.45**
255	.82	How do you and black students get along	high = warm, open	.20	.23	.24	.02	-.10
256	.83	How do you and white students get along	high = warm, open	.15	.18	.11	-.03	-.22
261	.38	How do black and white students get along	high = warm, open	.47**	.35**	.29*	.09	-.10
T-6 Interpersonal Relations among Teachers				.12	.21	.17	-.01	-.21
TQ251	.60	How do you and black teachers get along	high = warm, open	.12	.33**	.38**	.06	-.12
252	.85	How do you and white teachers get along	high = warm, open	.11	.06	.03	-.07	-.30*
260	.87	How do black and white teachers get along	high = warm, open	.04	.12	.10	.04	-.05
T-7 Interpersonal Relations of Principal				.09	.03	-.14	.05	-.16
TQ250	.78	How do you and the principal get along	high = warm, open	.11	-.05	.00	-.08	-.24
257	.84	How do the principal and teachers get along	high = warm, open	.10	.09	-.06	.19	-.01
258	.85	How do principal & black students get along	high = warm, open	.00	-.14	-.26*	-.10	-.19
259	.88	How do principal & white students get along	high = warm, open	-.01	-.09	-.24	-.01	-.11

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes: Perceived School Racial Attitude	Black Student Outcomes: Student Racial Attitude	Black Student Outcomes: Racial Contact	Black Student Outcomes: School Fairness	Black Student Outcomes: Achievement
T-8 School Autonomy				-.02	-.13	-.30*	.07	-.06
TQ262	-.51	Influence of school board	high = much	.13	.25*	.01	-.05	.02
263	-.38	Influence of superintendent	high = much	-.01	.01	-.19	-.01	.00
266	.73	Influence of black teachers	high = much	.00	-.01	-.19	.11	-.08
267	.65	Influence of white teachers	high = much	.05	-.02	-.20	.07	-.19
269	.84	Influence of black students	high = much	-.07	.03	-.20	.14	.09
270	.76	Influence of white students	high = much	-.14	-.18	-.28*	-.11	-.07
271	.70	Influence of black parents	high = much	-.05	-.07	-.23	.11	.12
272	.54	Influence of white parents	high = much	-.21	-.31*	-.22	-.13	-.05
T-9 Teacher Autonomy				.16	-.10	-.05	.19	-.07
TQ242	.49	Choice of jobs in this school	high = a lot	-.01	.18	.06	.15	.14
244	.66	Choice of kinds of students	high = a lot	.04	-.14	-.17	.00	-.15
245	.69	Choice of textbooks	high = a lot	.11	.07	.09	.19	.04
247	.68	Choice of own routine	high = a lot	.16	-.16	.02	.14	-.16
248	.57	Choice of own teaching style	high = a lot	-.16	-.12	-.09	.21	.01
268	.56	Your influence	high = a lot	.09	-.03	-.15	.12	-.13
T-10 Inequality of Black and White Students				-.14	-.04	-.11	-.35**	.01
TQ273	-.02	Unequal support for deseg: B & W teachers	high = bad	-.20	-.13	.01	-.02	.12
274	.65	Unequal friendliness: B & W teachers	high = bad	.02	.08	.08	-.19	.00
276	.25	Unequal friendliness: B & W students	high = bad	.00	-.17	-.18	-.14	-.03
277	.70	Unequal friendliness: Prnts. B & W students	high = bad	-.34**	-.04	-.17	-.21	.19
278	.76	Unequal influence: B & W teachers	high = bad	.13	.08	.03	-.02	-.02
279	.79	Unequal influence: B & W students	high = bad	-.22	-.12	-.08	-.40**	-.09

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes				
				Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-8 School Autonomy				.02	.14	-.07	.04	.13
TQ262	-.51	Influence of school board	high = much	-.05	.02	.18	-.14	-.18
263	-.38	Influence of superintendent	high = much	-.07	.04	-.01	-.04	-.05
266	.73	Influence of black teachers	high = much	.17	.22	-.06	.08	.08
267	.65	Influence of white teachers	high = much	.10	.17	-.06	.13	.18
269	.84	Influence of black students	high = much	-.18	-.01	-.15	.01	.08
270	.76	Influence of white students	high = much	-.21	.00	-.05	-.05	.14
271	.70	Influence of black parents	high = much	-.01	.01	-.07	-.04	.06
272	.54	Influence of white parents	high = much	-.13	.02	.05	-.12	-.01
T-9 Teacher Autonomy				.08	.33**	.24	.08	-.01
TQ242	.49	Choice of jobs in this school	high = a lot	.05	-.02	-.01	.03	-.11
244	.66	Choice of kinds of students	high = a lot	.04	.19	.07	-.16	-.11
245	.69	Choice of textbooks	high = a lot	-.01	.10	.11	-.01	.00
247	.68	Choice of own routine	high = a lot	.04	.28*	.13	.18	.10
248	.57	Choice of own teaching style	high = a lot	.03	.25*	.27*	.09	-.10
268	.56	Your influence	high = a lot	.13	.31	.10	.11	.10
T-10 Inequality of Black and White Students				-.11	-.18	-.21	.02	.08
TQ273	-.02	Unequal support for deseg: B & W teachers	high = bad	-.11	-.08	-.13	.07	.08
274	.65	Unequal friendliness: B & W teachers	high = bad	-.08	-.20	-.15	.04	.12
276	.25	Unequal friendliness: B & W students	high = bad	.13	-.12	-.25*	.00	.09
277	.70	Unequal friendliness: Prnts. B & W students	high = bad	-.27*	-.34**	-.28*	-.02	-.07
278	.76	Unequal influence: B & W teachers	high = bad	.07	.07	-.06	.12	.17
279	.79	Unequal influence: B & W students	high = bad	-.21	-.19	-.28*	-.05	-.01

Table B-2 (Continued)

Tenth Grade

				Black Student Outcomes				
I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-10 Continued								
TQ280	.75	Unequal influence: B & W parents	high = bad	-.05	-.16	-.06	-.32 *	-.08
281	.30	Unequal school mix for B & W students	high = bad	-.11	-.09	-.35**	.02	.06
282	.12	Unequal black and white discipline problems	high = bad	.02	.18	.04	.19	.08
283	.00	Unequal B & W grade level performance	high = bad	-.09	-.03	-.02	.14	.01
284	.51	Unequal teacher fairness	high = bad	-.23	.09	-.10	-.06	.05
T-11 Perceived Racial Differences				.03	-.02	-.04	.00	-.02
TQ218	.46	Black and white boys: Activity level	low = no difference	-.03	-.11	-.11	.06	.18
219	.61	Read better	low = no difference	-.05	.15	.08	.20	.02
220	.23	Musical	low = no difference	-.05	.20	.11	.07	.15
221	.21	Athletic	low = no difference	.03	.28*	.05	.01	-.01
222	.46	Adjusted to school	low = no difference	-.21	.04	.13	.04	.16
223	.75	Quicker to catch on	low = no difference	-.04	.09	.05	.12	.17
224	.49	More attentive	low = no difference	-.14	.09	.09	.02	.13
225	.64	Like to learn better	low = no difference	-.11	-.17	-.09	-.10	-.05
226	.68	Get along better	low = no difference	.06	-.12	-.11	-.01	.02
227	.60	Achievement oriented	low = no difference	-.21	.11	.07	.10	.00
228	.44	Cause more trouble	low = no difference	-.19	.05	-.04	-.15	.20
229	.63	Need more help	low = no difference	-.16	.01	-.04	-.05	.16

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description		Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-10 Continued									
TQ280	.75	Unequal influence: B & W parents		high = bad	-.11	-.02	-.03	-.12	-.05
281	.30	Unequal school mix for B & W students		high = bad	-.05	-.20	-.15	-.03	-.06
282	.12	Unequal black and white discipline problems		high = bad	-.22	.01	-.13	.14	.19
283	.00	Unequal B & W grade level performance		high = bad	-.35**	-.25*	-.14	.11	.33**
284	.51	Unequal teacher fairness		high = bad	.02	.02	-.06	.19	.24
T-11 Perceived Racial Differences					-.14	-.24	-.29*	-.05	.09
TQ218	.46	Black and white boys:	Activity level	low = no difference	-.15	-.26*	-.12	-.08	-.05
219	.61		Read better	low = no difference	-.07	-.08	-.18	.12	.24
220	.23		Musical	low = no difference	-.19	-.06	.03	-.09	.00
221	.21		Athletic	low = no difference	.00	-.12	-.04	-.03	.10
222	.46		Adjusted to school	low = no difference	-.20	-.06	-.03	.12	.16
223	.75		Quicker to catch on	low = no difference	-.15	-.22	-.24	.10	.25*
224	.49		More attentive	low = no difference	-.21	-.18	-.08	.10	.25*
225	.64		Like to learn better	low = no difference	-.33**	-.30*	-.15	.00	.10
226	.68		Get along better	low = no difference	-.15	-.24	-.16	-.04	-.08
227	.60		Achievement oriented	low = no difference	-.21	-.14	-.20	.08	.07
228	.44		Cause more trouble	low = no difference	-.36**	-.41**	-.27*	-.16	-.13
229	.63		Need more help	low = no difference	-.17	-.20	-.22	.03	.16

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
				Black Student Outcomes				
T-11 Continued								
TQ230	.64	Black and white girls: Activity level	low = no difference	.15	-.12	-.26*	.00	-.12
231	.75	Read better	low = no difference	.11	.02	-.08	.03	-.17
232	.24	Musical	low = no difference	.07	.02	.06	-.03	-.01
233	.30	Athletic	low = no difference	.19	.15	.02	.00	-.20
234	.70	Adjusted to school	low = no difference	.03	-.01	-.01	.12	-.09
235	.80	Quicker to catch on	low = no difference	.12	.08	-.03	.13	-.14
236	.73	More attentive	low = no difference	.17	.00	-.02	-.01	-.11
237	.67	Like to learn better	low = no difference	.22	-.18	-.19	.09	-.24
238	.71	Get along better	low = no difference	.03	-.11	-.06	-.07	-.01
239	.79	Achievement oriented	low = no difference	.11	.08	.07	.11	-.14
240	.58	Cause more trouble	low = no difference	-.01	-.02	.00	-.10	.06
241	.70	Need more help	low = no difference	.03	-.10	-.10	-.08	-.10
T-12 Desegregation Process				-.11	.09	.14	-.16	.08
TQ167	-.08	Minority groups demand ethnic studies	low = yes	.11	.07	-.14	-.14	-.10
168	.80	All students learning more	low = yes	-.07	.16	.10	.14	.19
170	.73	White students becoming less prejudiced	low = yes	-.05	.02	.18	-.19	.08
171	.87	New educational programs improving schools	low = yes	-.04	.08	.06	-.21	-.12

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description		Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-11 Continued									
TQ230	.64	Black and white girls:	Activity level	low = no difference	-.10	$-.27^{*}$	$-.36^{**}$	-.25	-.18
231	.75		Read better	low = no difference	.09	.03	-.18	-.08	.09
232	.24		Musical	low = no difference	-.05	-.04	.00	-.22	-.17
233	.30		Athletic	low = no difference	.13	-.13	-.18	-.09	-.11
234	.70		Adjusted to school	low = no difference	.03	.08	-.09	.06	.09
235	.80		Quicker to catch on	low = no difference	-.05	-.15	$-.26^{*}$	-.12	.06
236	.73		More attentive	low = no difference	.08	.00	-.14	-.13	.14
237	.67		Like to learn better	low = no difference	.06	-.16	-.22	-.01	-.07
238	.71		Get along better	low = no difference	-.11	-.24	-.19	-.13	.03
239	.79		Achievement oriented	low = no difference	-.06	-.07	-.19	-.09	-.05
240	.58		Cause more trouble	low = no difference	-.07	-.15	$-.31^{*}$	-.17	-.15
241	.70		Need more help	low = no difference	.00	-.14	-.23	-.09	.06
T-12 Desegregation Process					$-.43^{**}$	$-.41^{**}$	$-.36^{**}$	$-.30^{*}$	-.12
TQ167	-.08	Minority groups demand ethnic studies		low = yes	$.31^{*}$	.06	-.04	-.04	-.05
168	.80	All students learning more		low = yes	$-.27^{*}$	$-.28^{*}$	-.21	-.10	-.05
170	.73	White students becoming less prejudiced		low = yes	$-.41^{**}$	$-.43^{**}$	$-.44^{**}$	$-.29^{*}$	-.20
171	.87	New educational programs improving schools		low = yes	$-.26^{*}$	$-.33^{**}$	$-.35^{**}$	$-.33^{**}$	-.11

Table B-2 (Continued)

Tenth Grade

				Black Student Outcomes				
I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-14 Teacher Training				.10	-.18	-.27*	.27*	-.13
TQ028	.91	Amount of in-service training	high = much	-.05	-.08	-.20	.21	-.15
173	.84	Had training this year	high = yes	.02	-.12	-.17	.13	-.21
174	-.46	Evaluation of training	low = valuable	.25*	.24	.24	-.08	-.12
175	.57	Training changed thinking	high = yes	.04	-.28*	-.35**	.17	-.10
T-15 Evaluation of Principal				-.07	.02	-.02	-.31*	.10
TQ051	.84	Rate principal	low = best	-.13	.03	.01	-.37**	.07
163	.75	Supportive of black teachers	low = yes	-.07	.00	-.05	-.18	.04
164	.75	Supportive of white teachers	low = yes	-.02	-.14	-.16	-.16	.01
185	-.07	Spoken of unfairness to black students	low = yes	.16	.00	-.10	-.11	.19
186	-.16	Spoken of unfairness to white students	low = yes	.22	.08	.16	.01	.06
264	-.72	Influence of the principal	high = most	.08	-.13	-.04	.30*	-.24
265	-.40	Influence of the assistant principal	high = most	-.03	-.12	-.09	.09	-.07
HT039	.02	Values college prep. over vocational ed.	low = yes	.03	-.09	-.29*	.07	-.29*
T-16 Multi-racial Teaching				-.18	.10	.03	-.36**	.02
TQ037	.66	Multi-ethnic texts	low = yes	-.14	-.01	-.04	-.29*	.02
38	-.78	Projects on intergroup problems	low = no	-.13	-.05	-.10	.07	-.05
39	.68	Class discussion on race	low = often	.10	.14	.02	-.18	.24
201	.50	Minority group history	low = helpful to race relations	-.12	-.01	-.01	-.21	.03
213	-.05	Biracial advisory committee	low = helpful to race relations	.02	-.06	.05	.06	.20
HT025	.59	New biracial activities this year	low = yes	.09	.12	.10	-.33**	-.13
26	-.22	Clubs, teams integrated	low = yes	-.18	.04	-.09	-.21	.19
27	-.17	Official steps taken to integrate clubs	low = yes	.15	.19	-.12	.11	.04

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-14 Teacher Training				.11	.19	-.07	.05	.03
TQ028	.91	Amount of in-service training	high = much	.07	.10	-.02	.12	.06
173	.84	Had training this year	high = yes	.14	.09	-.04	.07	.09
174	-.46	Evaluation of training	low = valuable	.16	.05	.10	.03	.18
175	.57	Training changed thinking	high = yes	.03	.11	-.10	.10	-.05
T-15 Evaluation of Principal				-.27*	-.36**	-.29*	-.29*	-.06
TQ051	.84	Rate principal	low = best	-.27*	-.26*	-.24	-.21	-.01
163	.75	Supportive of black teachers	low = yes	-.17	-.21	-.14	-.06	.17
164	.75	Supportive of white teachers	low = yes	-.09	-.08	-.27*	-.16	-.02
185	-.07	Spoken of unfairness to black students	low = yes	.15	.05	.04	-.07	.16
186	-.16	Spoken of unfairness to white students	low = yes	.19	.21	.07	.02	.14
264	-.72	Influence of the principal	high = most	.22	.22	.01	.25*	.19
265	-.40	Influence of the assistant principal	high = most	.03	.27*	.01	.23	.26*
HT039	.02	Values college prep. over vocational ed.	low = yes	.03	-.11	-.24	-.13	-.16
T-16 Multi-racial Teaching				-.23	-.43**	-.22	-.18	-.12
TQ037	.66	Multi-ethnic texts	low = yes	-.23	-.23	-.10	-.10	-.11
38	-.78	Projects on intergroup problems	low = no	-.04	.19	.03	.16	.24
39	.68	Class discussion on race	low = often	.06	-.26*	-.06	-.08	.14
201	.50	Minority group history	low = helpful to race relations	-.35**	-.23	-.18	.04	.13
213	-.05	Biracial advisory committee	low = helpful to race relations	-.25*	-.19	-.20	-.03	.08
HT025	.59	New biracial activities this year	low = yes	-.03	-.08	-.04	-.15	-.05
26	-.22	Clubs, teams integrated	low = yes	-.22	-.26*	-.19	.03	.07
27	-.17	Official steps taken to integrate clubs	low = yes	.13	.12	.03	.06	.08

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
				Black Student Outcomes				
T-17 Evaluation of School Services				-.05	.02	-.06	-.37**	-.08
TQ195	.79	Guidance Counselors	low = helpful to race relations	-.09	-.09	-.20	-.32*	-.11
196	.77	Social workers	low = helpful to race relations	.01	.00	-.04	-.20	-.15
197	.65	Teacher aides	low = helpful to race relations	-.08	.14	.10	-.25*	.07
T-18 Evaluation of Human Relations Programs				.06	-.10	.04	-.06	.04
TQ210	.76	Parent-teacher contact	low = helpful to race relations	.05	-.09	.16	-.12	.12
211	.82	Intergroup relations: students	low = helpful to race relations	-.05	-.11	-.05	-.03	.00
212	.84	Intergroup relations: teachers	low = helpful to race relations	-.05	-.18	-.04	-.02	.07
T-19 Evaluation of Instructional Programs				.08	.29*	.23	-.18	-.03
TQ198	.24	Teacher training	low = helpful to race relations	-.04	.08	.07	-.22	-.02
199	.56	Remedial reading	low = helpful to race relations	.00	.05	.16	-.26*	.19
200	.62	Vocational training	low = helpful to race relations	.06	.07	.12	-.31*	-.10
202	.75	Classes for underachievers	low = helpful to race relations	-.06	.16	.16	-.21	-.14
203	.62	Classes for the maladjusted	low = helpful to race relations	.14	.22	.17	.10	-.16
204	.66	Achievement grouping of classrooms	low = helpful to race relations	.02	.07	.07	-.13	-.19
205	.58	Achievement grouping within classes	low = helpful to race relations	.02	.24	.14	.17	.04
209	.31	Tutoring programs	low = helpful to race relations	.09	.01	.20	-.08	.36**

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	School Racial Attitude	Racial Contact	School Fairness	Achievement
T-17 Evaluation of School Services				-.31*	-.48**	-.29*	-.31*	-.16
TQ195	.79	Guidance Counselors	low = helpful to race relations	-.28*	-.51**	-.41**	-.19	-.27*
196	.77	Social workers	low = helpful to race relations	-.14	-.28*	-.06	-.21	-.19
197	.65	Teacher aides	low = helpful to race relations	-.21	-.19	-.19	-.21	.07
T-18 Evaluation of Human Relations Programs				-.22	-.34**	-.27*	-.12	.05
TQ210	.76	Parent-teacher contact	low = helpful to race relations	-.11	-.21	-.20	-.01	.22
211	.82	Intergroup relations: students	low = helpful to race relations	-.35**	-.36**	-.23	-.12	-.05
212	.84	Intergroup relations: teachers	low = helpful to race relations	-.06	-.29*	-.27*	-.01	.01
T-19 Evaluation of Instructional Programs				-.18	-.11	-.09	-.04	.00
TQ198	.24	Teacher training	low = helpful to race relations	-.11	-.18	-.16	-.03	-.03
199	.56	Remedial reading	low = helpful to race relations	-.18	-.13	.02	-.15	-.01
200	.62	Vocational training	low = helpful to race relations	-.22	-.29*	-.22	-.18	-.11
202	.75	Classes for underachievers	low = helpful to race relations	-.10	-.02	.03	.08	.00
203	.62	Classes for the maladjusted	low = helpful to race relations	.15	.02	-.07	.16	.01
204	.66	Achievement grouping of classrooms	low = helpful to race relations	-.17	-.10	-.03	-.02	.09
205	.58	Achievement grouping within classes	low = helpful to race relations	-.13	.04	-.07	.03	.05
209	.31	Tutoring programs	low = helpful to race relations	-.02	-.19	-.17	-.11	-.18

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes: Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-20 Teaching Style				-.16	.02	-.14	-.17	.11
TQ130	.87	Time spent warning students	high = often	-.19	-.04	-.12	-.25*	.06
131	.50	Time spent giving directions	high = often	-.08	.02	-.03	.22	.14
132	.13	Time spent praising	high = often	.07	.18	.00	.06	-.03
133	.86	Time spent scolding	high = often	.02	.05	-.10	-.20	.16
134	-.08	Time spent in class discussion	high = often	,18	.24	-.15	.20	-.18
P-1 Principal's Racial Attitude				.18	-.11	.03	-.04	-.33**
PI221	.54	Black students better off in mixed schools	high = yes	.13	-.25*	.01	-.03	-.38**
222	.64	White students better off in mixed schools	high = yes	-.05	-.43**	-.20	-.17	-.18
223	.76	Black failure due to white restrictions	high = agreement	-.02	-.10	.04	-.02	-.04
224	.58	The amount of prejudice is exaggerated	low = agreement	.28*	.03	.00	.09	-.02
225	-.65	Like to live in an integrated neighborhood	low = agreement	-.01	.24	.01	.12	.34**
226	-.08	Civil Rights: more good than harm	low = agreement	.13	.18	.21	.06	-.15
227	.75	Blacks and whites should not intermarry	low = agreement	.19	.06	.08	-.04	-.32*
P-2 Support for Integration				-.16	-.07	-.12	.12	-.04
PI243	.57	Principal liking for desegregation	high = no	-.07	-.14	-.08	.06	-.09
267	.78	White teachers like desegregation	high = no	-.20	.15	-.18	.16	.12
268	.83	Black teachers like desegregation	high = no	-.09	.00	-.23	-.01	-.16
269	.71	Your superior likes desegregation	high = no	-.07	-.07	.21	.08	.03
270	.87	Superintendent likes desegregation	high = no	.14	-.02	-.14	.18	-.10

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes				
				Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
T-20 Teaching Style				-.35**	-.32*	-.36**	-.25*	-.09
TQ130		Time spent warning students	high = often	-.33**	-.24	-.23	-.25*	-.14
131		Time spent giving directions	high = often	-.07	-.01	-.14	.03	.10
132		Time spent praising	high = often	.02	-.06	-.04	-.13	.00
133		Time spent scolding	high = often	-.26*	-.19	-.21	-.20	-.02
134		Time spent in class discussion	high = often	.06	.09	.19	-.02	.00
P-1 Principal's Racial Attitude				.33**	.38**	.24	-.02	-.03
PI221	.54	Black students better off in mixed schools	high = yes	-.01	.02	.02	-.14	-.08
222	.64	White students better off in mixed schools	high = yes	.13	.16	.19	-.13	-.17
223	.76	Black failure due to white restrictions	high = agreement	.22	.17	.23	.12	.11
224	.58	The amount of prejudice is exaggerated	low = agreement	.24	.37**	.07	.08	.22
225	-.65	Like to live in an integrated neighborhood	low = agreement	-.05	-.03	.07	.11	.15
226	-.08	Civil Rights: more good than harm	low = agreement	.04	-.12	-.03	-.33**	-.32*
227	.75	Blacks and whites should not intermarry	low = agreement	.20	.13	.01	-.26*	.00
P-2 Support for Integration				-.11	-.20	-.27*	.20	.16
PI243	.57	Principal liking for desegregation	high = no	.12	.18	-.12	.11	.11
267	.78	White teachers like desegregation	high = no	-.31*	-.56**	-.48**	.01	.06
268	.83	Black teachers like desegregation	high = no	-.20	-.33*	-.20	-.02	.02
269	.71	Your superior likes desegregation	high = no	.18	.19	.07	.44**	.15
270	.87	Superintendent likes desegregation	high = no	.20	.23	.04	.26*	.16

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
P-3 Absence of Conflict Regarding Discipline				.20	.01	.01	.40**	.07
PI192	.68	Conflict between teachers and parents	high = no problem	.39**	.02	-.10	.40**	.05
196	.85	Conflict between teachers and administration	high = no problem	.15	.04	.10	.27*	-.03
200	.87	Conflict among teachers	high = no problem	.17	.09	-.01	.43**	.04
205	.76	Conflict between teachers and students	high = no problem	.08	.04	.04	.29*	.17
P-4 Absence of Conflict: Racial Issues				.48**	.17	.05	.36**	-.04
PI194	.77	Conflict between teachers and parents	low = serious problem	.50**	.16	.09	.23	-.03
198	.81	Conflict between teachers and administration	low = serious problem	.42**	.26*	.12	.28*	.09
202	.74	Conflict among teachers	low = serious problem	.29*	.08	.10	.37**	.01
207	.41	Conflict between teachers and students	low = serious problem	.10	.16	-.04	.19	.10
187	.44	Is there a contingency plan	high = no	.32*	.19	.05	.30*	-.20
190	.61	Had faculty meetings on racial issues	high = no	.21	-.07	-.15	.11	-.18
P-5 Absence of Conflict: Ability Grouping				-.17	-.02	.19	.23	.16
PI193	.79	Conflict between teachers and parents	low = serious problem	-.20	.00	.11	.27*	.27*
197	.90	Conflict between teachers and administration	low = serious problem	-.07	.09	.22	.23	.06
201	.81	Conflict among teachers	low = serious problem	-.03	-.13	.13	.13	.07
P-6 Absence of Conflict: Instructional Change				.30*	.18	.11	.36**	.16
PI199	.92	Conflict between teachers and administration	low = serious problem	.22	.21	.16	.33**	.10
203	.92	Conflict among teachers	low = serious problem	.37**	.19	.03	.37**	.16

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
P-3 Absence of Conflict Regarding Discipline				.23	.34**	.25*	.50**	.28*
PI192	.68	Conflict between teachers and parents	high = no problem	.09	.24	.18	.22	.20
196	.85	Conflict between teachers and administration	high = no problem	.22	.41**	.35**	.48**	.30*
200	.87	Conflict among teachers	high = no problem	.18	.25*	.14	.46**	.19
205	.76	Conflict between teachers and students	high = no problem	.35**	.40**	.23	.48**	.19
P-4 Absence of Conflict: Racial Issues				.36**	.39**	.28*	.38**	.16
PI194	.77	Conflict between teachers and parents	low = serious problem	.41**	.41**	.32*	.23	.04
198	.81	Conflict between teachers and administration	low = serious problem	.28*	.48**	.43**	.47**	.31*
202	.74	Conflict among teachers	low = serious problem	.24	.28*	.17	.42**	.18
207	.41	Conflict between teachers and students	low = serious problem	.00	.09	.07	.04	-.06
187	.44	Is there a contingency plan	high = no	.29*	.12	.17	.18	.06
190	.61	Had faculty meetings on racial issues	high = no	.19	.18	-.08	.08	-.01
P-5 Absence of Conflict: Ability Grouping				.09	.25*	.15	.55**	.44**
PI193	.79	Conflict between teachers and parents	low = serious problem	.03	.23	.10	.37**	.29*
197	.90	Conflict between teachers and administration	low = serious problem	.12	.21	.08	.60**	.47**
201	.81	Conflict among teachers	low = serious problem	.10	.27*	.21	.41**	.32*
P-6 Absence of Conflict: Instructional Change				.00	.22	.29*	.38**	.33**
PI199	.92	Conflict between teachers and administration	low = serious problem	.01	.29*	.36**	.37**	.30*
203	.92	Conflict among teachers	low = serious problem	.04	.24	.28*	.33**	.28*

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
				Black Student Outcomes				
P-7 Absence of Principal's Personal Conflict				.06	.30*	.24	.39**	.14
PI209	.91	Working after school hours	low = serious problem	.13	.20	.10	.39**	.12
210	.95	Working weekends	low = serious problem	.07	.25*	.26*	.42**	.27 *
211	.88	Receiving phone calls at home	low = serious problem	-.11	.34**	.31*	.25*	.00
212	.09	Evening functions at school	low = serious problem	.08	-.02	-.18	.01	.02
P-8 School SES				.14	.21	.21	.04	-.05
PI164	.61	Percent disadvantaged	low = low percentage	.11	.02	.15	-.22	-.08
166	.74	Percent of free school lunches	low = low percentage	.29*	.17	.32*	.02	[illegible]10
167	-.67	Percent parents college graduates	low = low percentage	.02	.08	.19	-.26	-.09
168	.50	Percent parents not beyond high school	low = low percentage	-.09	.16	.17	.24	.16
169	-.55	Percent parents professionals	low = low percentage	.01	-.04	.09	-.14	.08
170	.81	Percent parents unskilled	low = low percentage	.27*	.11	.11	.03	.02
171	-.68	Percent family income over $15,000	low = low percentage	-.12	-.07	.02	.07	.12
172	.82	Percent family income under $8,000	low = low percentage	.17	.32*	.31*	.03	-.04
P-9 Violent Behavior				-.06	.04	-.13	-.13	-.01
PI229	.72	Number fights requiring treatment	low = few	-.14	-.13	.02	-.21	.01
230	.42	Number of times lockers broken into	low = few	.04	-.02	-.18	00	.00
231	.54	Number of student robberies	low = few	-.22	-.04	-.08	-.01	.19
232	.74	Number of attacks on a teacher	low = few	-.01	.05	-.01	-.17	-.10
233	.78	Number of robberies of school property	low = few	-.13	-.09	-.24	-.07	-.04

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
P-7 Absence of Principal's Personal Conflict				.01	.00	.19	.38**	.07
PI209	.91	Working after school hours	low = serious problem	.02	-.12	.00	.36**	.04
210	.95	Working weekends	low = serious problem	.01	.05	.26*	.34**	.05
211	.88	Receiving phone calls at home	low = serious problem	-.04	.01	.25*	.34**	.12
212	.09	Evening functions at school	low = serious problem	.13	.14	.03	-.08	.06
P-8 School SES				.27*	.03	-.03	-.02	-.32*
PI164	.61	Percent disadvantaged	low = low percentage	.04	-.21	.04	-.19	-.11
166	.74	Percent of free school lunches	low = low percentage	.21	.00	.10	-.06	-.09
167	-.67	Percent parents college graduates	low = low percentage	-.08	.07	.24	-.19	.08
168	.50	Percent parents not beyond high school	low = low percentage	.09	.10	.11	-.07	-.22
169	-.55	Percent parents professionals	low = low percentage	-.05	.14	.23	-.07	.22
170	.81	Percent parents unskilled	low = low percentage	.19	.00	-.06	-.19	-.41**
171	-.68	Percent family income over $15,000	low = low percentage	-.07	-.02	.04	-.14	-.09
172	.82	Percent family income under $8,000	low = low percentage	.24	.05	-.02	-.07	-.07
P-9 Violent Behavior				-.22	-.18	-.17	.07	.03
PI229	.72	Number fights requiring treatment	low = few	-.22	-.19	.01	-.07	-.02
230	.42	Number of times lockers broken into	low = few	-.03	.04	.14	.22	.36**
231	.54	Number of student robberies	low = few	-.26*	-.24	-.29*	-.07	.02
232	.74	Number of attacks on a teacher	low = few	-.18	-.12	-.15	-.03	-.17
233	.78	Number of robberies of school property	low = few	-.17	-.25*	-.29*	.09	.08

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes: Perceived School Racial Attitude	Black Student Outcomes: Student Racial Attitude	Black Student Outcomes: Racial Contact	Black Student Outcomes: School Fairness	Achievement
P-10 Principal's Interpersonal Relations				.07	.09	.06	-.08	-.07
PQ124	.59	You and administration	high = warm, open	-.14	-.13	.06	-.22	-.19
125	.83	You and black teachers	high = warm, open	.06	.00	.15	.01	-.20
126	.78	You and white teachers	high = warm, open	.11	-.04	-.02	-.07	-.15
127	.72	You and black parents	high = warm, open	.20	.28*	.20	.05	.01
128	.73	You and white parents	high = warm, open	.16	.13	-.03	.01	.05
129	.79	You and black students	high = warm, open	.12	.14	.01	.03	.11
130	.80	You and white students	high = warm, open	.09	.12	.00	.07	.11
P-11 Inequality				.03	-.07	.15	.19	.05
PQ133	.25	Unequal friendliness: B & W teachers	high = bad	-.01	-.05	-.02	.06	-.07
134	.52	Unequal friendliness: B & W parents	high = bad	.06	.03	.13	-.01	.07
PI256	.72	Unequal attendance by B & W parents	high = bad	-.03	-.20	.06	.20	.09
257	.84	Unequal black & white parent visits	high = bad	.04	-.02	.17	.18	.11
258	.74	Unequal black & white parents sent for	high = bad	-.10	.05	.29*	.02	.09
P-12 Omitted								
P-13 Principal's Job Attitude				-.02	-.21	-.15	-.03	.17
PI234	.77	Principal can have important effect	low = yes	-.10	-.21	-.10	.13	.16
235	.77	How often do you worry about work	high = often	.03	-.11	-.11	-.17	.17
P-14 Evaluation of Race-Relations Programs				.12	[illegible]	.24	-.01	-.07
PQ019	.71	Minority culture courses	low = adequate	.00	[illegible]	.04	-.27*	-.22
52	.71	Biracial advisory committee	low = adequate	.18	.06	.25*	.15	.07

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
				White Student Outcomes				
P-10 Principal's Interpersonal Relations				.07	.29*	.05	-.15	.03
PQ124	.59	You and administration	high = warm, open	-.14	.08	-.26*	-.10	-.08
125	.83	You and black teachers	high = warm, open	-.04	.25*	.01	-.14	-.03
126	.78	You and white teachers	high = warm, open	.04	.23	-.11	-.10	.00
127	.72	You and black parents	high = warm, open	.11	.29*	.20	-.14	.17
128	.73	You and white parents	high = warm, open	.06	.28*	.06	-.08	.20
129	.79	You and black students	high = warm, open	.16	.20	.01	-.08	.01
130	.80	You and white students	high = warm, open	.11	.19	-.03	-.09	.01
P-11 Inequality				-.10	.03	.23	.17	.09
PQ133	.25	Unequal friendliness: B & W teachers	high = bad	-.02	-.15	.02	.01	-.02
134	.52	Unequal friendliness: B & W parents	high = bad	-.01	-.14	.08	.05	.00
PI256	.72	Unequal attendance by B & W parents	high = bad	-.14	-.02	.05	.17	.04
257	.84	Unequal black & white parent visits	high = bad	-.02	.01	.19	.21	.07
258	.74	Unequal black & white parents sent for	high = bad	-.06	.14	.47**	.12	.18
P-12 Omitted								
P-13 Principal's Job Attitude				-.01	-.12	-.10	-.17	-.08
PI234	.77	Principal can have important effect	low = yes	-.02	.12	.11	.11	-.01
235	.77	How often do you worry about work	high = often	-.01	-.27*	-.19	-.30*	-.10
P-14 Evaluation of Race-Relations Programs				.02	-.08	-.09	.01	-.07
PQ019	.71	Minority culture courses	low = adequate	-.01	-.25*	-.08	-.09	-.03
52	.71	Biracial advisory committee	low = adequate	.15	.14	.10	.10	-.10

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
P-15 Evaluation of Instructional Programs				.09	.12	.16	-.04	-.04
PQ010	.53	Teacher workshops	low = adequate	-.01	.20	.07	.25*	.14
13	.38	Remedial reading	low = adequate	.04	.18	.18	.09	.11
16	.40	Vocational training	low = adequate	.14	.21	.18	-.02	-.25*
22	.73	Classrooms for underachievers	low = adequate	.07	.24	.22	-.26*	-.18
25	.68	Classrooms for maladjusted	low = adequate	.14	-.06	-.05	.01	-.04
28	.60	Achievement grouping	low = adequate	-.38**	-.25*	.12	-.27*	.11
40	.61	Tutoring program	low = adequate	.25*	-.07	-.11	.05	-.05
P-16 Evaluation of Human Relations Programs				.11	.09	-.08	-.08	-.23
PQ043	.65	Parent-teacher contact program	low = adequate	.33**	.23	-.02	.10	-.16
46	.90	Intergroup student relations program	low = adequate	.10	.00	.00	-.14	-.25*
49	.90	Intergroup teacher relations program	low = adequate	.07	.05	-.18	-.02	-.15
P-17 Evaluation of Services				.37**	.29*	.22	.27*	-.18
PQ001	.77	Guidance counselors adequate	low = adequate	.07	.16	.31*	-.06	-.21
04	.78	Home visitor adequate	low = adequate	.26*	.14	-.04	.37**	-.07
07	.03	Teacher aides adequate	low = adequate	.09	.27*	.21	.06	.15
C-1 Counselors' Racial Attitudes				.10	-.06	.07	-.04	-.06
GC064	-.76	The amount of prejudice is exaggerated	low = agreement	.00	.01	-.15	.05	.10
65	.71	Like to live in integrated neighborhood	low = agreement	.02	-.04	.27	-.08	.13
66	.48	Civil Rights: more good than harm	low = agreement	-.28*	-.24	-.01	-.08	.13
67	-.77	Blacks and whites should not intermarry	low = agreement	.00	.09	.09	-.06	.04
68	.75	Black failure due to white restrictions	high = agreement	.01	-.11	-.23	-.16	-.21

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
P-15 Evaluation of Instructional Programs				-.15	.05	.29*	.00	.06
PQ010	.53	Teacher workshops	low = adequate	.03	.14	.29*	.04	-.12
13	.38	Remedial reading	low = adequate	-.02	.01	.25*	.01	-.03
16	.40	Vocational training	low = adequate	-.03	.07	.22	.02	-.03
22	.73	Classrooms for underachievers	low = adequate	-.23	.03	.30*	-.09	.12
25	.68	Classrooms for maladjusted	low = adequate	-.16	-.03	.07	-.01	.14
28	.60	Achievement grouping	low = adequate	-.28*	-.17	-.03	.14	.16
40	.61	Tutoring program	low = adequate	.16	.16	.18	-.09	-.08
P-16 Evaluation of Human-Relations Programs				.01	-.07	-.05	-.08	-.16
PQ043	.65	Parent-teacher contact program	low = adequate	.16	.09	.09	.03	-.01
46	.90	Intergroup student relations program	low = adequate	-.05	-.04	.00	-.17	-.20
49	.90	Intergroup teacher relations program	low = adequate	.03	-.07	-.11	-.11	-.18
P-17 Evaluation of Services				.28*	.34**	.30*	.06	.08
PQ001	.77	Guidance counselors adequate	low = adequate	.02	.02	.15	.01	.06
04	.78	Home visitor adequate	low = adequate	.36**	.35**	.17	.07	.06
07	.03	Teacher aides adequate	low = adequate	-.01	.32*	.45**	.20	.06
C-1 Counselors' Racial Attitudes				.18	.25	.19	-.04	.14
GC064	-.76	The amount of prejudice is exaggerated	low = agreement	-.04	-.11	-.10	.02	-.21
65	.71	Like to live in integrated neighborhood	low = agreement	.23	.19	.19	.06	.15
66	.48	Civil Rights: more good than harm	low = agreement	.01	-.08	-.11	-.01	-.04
67	-.77	Blacks and whites should not intermarry	low = agreement	-.02	-.14	-.14	.03	.00
68	.75	Black failure due to white restrictions	high = agreement	.18	.07	.04	-.07	.14

Table B-2 (Continued)

Tenth Grade

				Black Student Outcomes				
I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-2 Rules and Discipline				.00	-.01	.04	.12	.11
GC108	.66	Skipping: student spoken to	high = often	-.02	.04	-.01	.08	.19
109	.78	parents informed	high = often	.04	.17	.03	.16	.08
110	.65	parent conference	high = often	-.18	.06	.09	-.07	.12
111	.23	privileges restricted	high = often	.01	-.08	-.14	-.27	.01
112	.15	kept after school	high = often	-.13	.05	-.10	.07	.36**
113	-.04	suspended	high = often	.04	.06	.05	.00	.05
115	-.09	dropped	high = often	.12	.05	-.15	.15	-.15
116	-.76	nothing done	high = often	-.03	.08	-.07	.03	-.08
117	.72	Rules enforced: disruptive behavior	high = strictly	.07	.16	.16	.25	.17
118	.81	destroying property	high = strictly	.18	.01	.08	.21	.14
119	.49	dress code violations	high = strictly	-.13	-.07	.00	-.10	.13
120	.72	cutting classes	high = strictly	.06	.02	-.09	.07	.05
121	.43	smoking cigarettes	high = strictly	-.11	-.09	.04	-.18	.09
122	.71	fighting	high = strictly	.14	-.14	.03	.03	-.09
123	.44	drug use	high = strictly	.06	-.19	.05	-.10	.07
124	.53	back talk	high = strictly	.22	.05	.10	.20	.03
125	.52	weapons	high = strictly	.17	-.19	.15	.03	.01
C-3 Guidance Counselor Duties				.07	-.02	-.13	-.04	-.11
GC127	.57	Percent time spent scheduling	high = a lot	.13	.03	-.15	.09	-.09
128	.50	Percent time handling discipline	high = a lot	-.13	.08	-.01	-.05	-.03
130	-.92	Percent time academic counseling	high = a lot	-.02	.05	.09	-.01	.13
131	.36	Percent time personal counseling	high = a lot	-.05	-.12	.00	-.02	-.05

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-2 Rules and Discipline				-.04	.23	.22	.29*	-.01
GC108	.66	Skipping: student spoken to	high = often	-.16	-.01	.04	.12	.01
109	.78	parents informed	high = often	-.13	.09	.15	.19	.03
110	.65	parent conference	high = often	-.29*	.04	.10	.13	.08
111	.23	privileges restricted	high = often	.00	-.04	-.09	.03	.04
112	.15	kept after school	high = often	-.27	-.19	-.21	.10	.09
113	-.04	suspended	high = often	.00	.17	.20	.02	.07
115	-.09	dropped	high = often	-.04	-.08	-.13	-.03	-.11
116	-.76	nothing done	high = often	-.06	-.12	-.19	-.16	.10
117	.72	Rules enforced: disruptive behavior	high = strictly	.13	.25	.27	.32*	-.04
118	.81	destroying property	high = strictly	.16	.31*	.31*	.24	-.04
119	.49	dress code violations	high = strictly	-.18	.06	.20	-.03	.03
120	.72	cutting classes	high = strictly	.05	.14	.10	.04	-.20
121	.43	smoking cigarettes	high = strictly	-.06	-.01	.07	.19	.03
122	.71	fighting	high = strictly	.11	.29*	.17	.27	.07
123	.44	drug use	high = strictly	.13	.02	.00	-.02	-.01
124	.53	back talk	high = strictly	.07	.15	.07	.22	.21
125	.52	weapons	high = strictly	.22	.46**	.33*	.21	.09
C-3 Guidance Counselor Duties				-.04	.05	-.17	-.25	-.16
GC127	.57	Percent time spent scheduling	high = a lot	.06	-.02	-.16	.08	.05
128	.50	Percent time handling discipline	high = a lot	-.14	-.04	-.11	-.33*	-.32*
130	-.92	Percent time academic counseling	high = a lot	.08	.04	.22	.15	.08
131	.36	Percent time personal counseling	high = a lot	.11	.22	.10	-.21	-.29*

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Table B-2 (Continued)

Tenth Grade

I.D.	Loading		Description	Scale Direction	Black Student Outcomes				
					Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-4 Perceived Racial Differences					-.03	.09	-.02	.09	-.11
GC182	.57	B & W boys:	Activity level	low = no difference	.14	.06	-.19	.05	-.30*
183	.63		Successful in academics	low = no difference	-.10	-.05	.02	.09	.05
184	.54		Better - vocational	low = no difference	-.09	-.01	.04	-.03	.11
185	.36		Athletes	low = no difference	.07	.20	.00	-.01	-.14
186	.67		Adjusted in school	low = no difference	.09	.18	.03	.12	-.08
187	.60		Better - business courses	low = no difference	-.19	-.07	.13	-.14	-.13
188	.45		Pay more attention	low = no difference	.24	.06	-.01	.30*	-.12
189	.34		Like to counsel	low = no difference	-.07	.02	.04	.10	-.02
190	.48		Get along better socially	low = no difference	-.11	.02	-.21	.06	.13
191	.68		More achievement oriented	low = no difference	.00	.02	-.04	.14	.01
192	.58		Cause more trouble	low = no difference	.20	.27	.24	.19	.18
193	.46		Need more help	low = no difference	.19	.16	.05	.10	.03
GC194	.54	B & W girls:	Activity level	low = no difference	.06	-.05	-.07	.00	-.36**
195	.62		Successful in academics	low = no difference	-.13	.04	.07	.10	.04
196	.61		Better - vocational	low = no difference	-.08	.02	.05	-.08	.08
197	.42		Athletes	low = no difference	-.19	-.13	.07	-.18	-.10
198	.63		Adjusted in school	low = no difference	-.12	.04	.15	-.07	-.14
199	.53		Better - business courses	low = no difference	-.14	-.02	.12	-.09	-.10
200	.61		Pay more attention	low = no difference	.20	.20	.05	.16	-.13
201	.29		Like to counsel	low = no difference	-.07	.03	.02	.10	-.14
202	.40		Get along better socially	low = no difference	-.13	-.10	-.24	-.03	-.02
203	.58		More achievement oriented	low = no difference	-.03	.26	.12	.12	-.06
204	.58		Cause more trouble	low = no difference	-.05	.34*	.19	.15	.04
205	.42		Need more help	low = no difference	.15	.15	-.02	.00	.00

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description		Scale Direction	White Student Outcomes: Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-4 Perceived Racial Differences					-.17	-.31*	-.15	.00	-.09
GC182	.57	B & W boys:	Activity level	low = no difference	-.01	-.16	-.09	-.05	-.29*
183	.63		Successful in academics	low = no difference	.07	-.09	-.06	-.07	-.08
184	.54		Better - vocational	low = no difference	-.14	-.40**	-.25	.14	-.07
185	.36		Athletes	low = no difference	-.01	-.13	-.11	-.17	-.13
186	.67		Adjusted in school	low = no difference	-.02	-.04	-.08	.01	.13
187	.60		Better - business courses	low = no difference	-.31*	-.25	-.01	.01	-.04
188	.45		Pay more attention	low = no difference	.04	.00	-.19	.21	.02
189	.34		Like to counsel	low = no difference	-.01	-.03	.01	.10	-.08
190	.48		Get along better socially	low = no difference	-.23	-.32*	-.13	.21	.24
191	.68		More achievement oriented	low = no difference	.01	-.05	-.01	-.05	-.14
192	.58		Cause more trouble	low = no difference	-.04	-.01	.08	-.08	-.17
193	.46		Need more help	low = no difference	.01	-.18	-.15	-.02	-.14
GC194	.54	B & W girls:	Activity level	low = no difference	-.03	-.02	-.03	-.03	-.17
195	.62		Successful in academics	low = no difference	.07	.12	.15	.06	.17
196	.61		Better - vocational	low = no difference	-.30*	-.42**	-.22	.04	-.09
197	.42		Athletes	low = no difference	-.32*	-.26	-.15	-.19	-.17
198	.63		Adjusted in school	low = no difference	-.10	.16	.09	.03	.10
199	.53		Better - business courses	low = no difference	-.22	-.17	.05	.05	-.03
200	.61		Pay more attention	low = no difference	-.11	-.05	-.14	.07	.07
201	.29		Like to counsel	low = no difference	.08	.07	.03	.12	-.01
202	.40		Get along better socially	low = no difference	-.09	-.13	-.11	.08	.16
203	.58		More achievement oriented	low = no difference	.00	.06	.14	-.01	-.02
204	.58		Cause more trouble	low = no difference	-.10	.06	.09	.12	.09
205	.42		Need more help	low = no difference	-.02	-.22	-.23	-.05	-.08

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes: Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-5 Evaluation of Facilities				-.03	-.01	.06	.21	.24
GC207	.65	Gym	high = good	.05	.07	.10	.28*	.00
209	.55	Media Center	high = good	.03	-.20	-.15	-.02	.02
210	.65	Language Lab	high = good	.00	-.07	-.08	.22	.27
211	.76	Science Lab	high = good	-.02	-.01	.04	.12	.21
213	.27	Computer Lab	high = good	.24	.05	.03	.33*	-.09
214	.80	Arts & Crafts facilities	high = good	.00	.08	.22	.13	.36 **
215	.76	Glee club facilities	high = good	-.21	.04	.06	.15	.23
217	.78	Theatre Arts facilities	high = good	-.06	-.16	.02	.11	.26
218	.58	Home Economics	high = good	.02	.14	.21	.13	.16
219	.68	Typing facilities	high = good	.03	.11	.11	.02	.27
221	.70	Work-study programs	high = good	.01	-.04	.20	.14	.03
222	.51	Auto Mechanics facilities	high = good	.04	.04	.20	.14	-.02
223	.52	Woodworking facilities	high = good	-.10	-.06	.20	.02	.05
C-6 Counseling Practices				.07	.00	-.06	-.05	-.06
GC270	.41	Students helped to plan own programs	high = often	-.15	-.07	.13	-.13	.06
273	.82	Discipline problems sent to other schools	high = often	.23	-.02	-.12	.03	-.22
276	-.61	Students choose own counselor	high = often	.01	.01	.11	.07	-.07

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-5 Evaluation of Facilities				.17	.14	.09	.26	.08
GC207	.65	Gym	high = good	.09	.11	.08	.22	.12
209	.55	Media Center	high = good	.08	-.12	-.11	-.01	-.13
210	.65	Language Lab	high = good	.01	-.12	-.05	.20	.00
211	.76	Science Lab	high = good	-.03	.04	.05	.12	.11
213	.27	Computer Lab	high = good	.16	.09	.08	-.13	-.27
214	.80	Arts & Crafts facilities	high = good	.22	.15	.05	.28*	.24
215	.76	Glee club facilities	high = good	-.01	.22	.16	.29*	.13
217	.78	Theatre Arts facilities	high = good	-.07	.08	.01	.34*	.21
218	.58	Home Economics	high = good	.22	.03	-.01	.14	.07
219	.68	Typing facilities	high = good	.23	.03	-.05	.06	.00
221	.70	Work-study programs	high = good	.29*	.24	.10	.24	.15
222	.51	Auto Mechanics facilities	high = good	.21	.13	.03	.06	-.01
223	.52	Woodworking facilities	high = good	.06	.13	.02	.07	-.15
C-6 Counseling Practices				.04	.20	.02	-.08	-.04
GC270	.41	Students helped to plan own programs	high = often	.03	.17	.03	.11	-.03
273	.82	Discipline problems sent to other schools	high = often	.04	.02	-.13	-.32*	-.16
276	-.61	Students choose own counselor	high = often	-.18	-.12	.00	-.07	-.07

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
				Black Student Outcomes				
C-7 Interpersonal Relations of Principal				-.03	.14	.06	.04	.02
GC296	.78	How do you and the principal get along	high - warm, open	.00	.13	.12	.07	.11
303	.86	How do principal and teachers get along	high - warm, open	.07	.08	.05	.04	.04
304	.94	How do principal and B students get along	high - warm, open	-.07	.15	-.01	.06	-.05
305	.94	How do principal and W students get along	high - warm, open	-.08	.16	.00	.08	-.06
C-8 Interpersonal Relations with Teachers				-.07	.20	.19	.12	.02
GC297	.87	How do you and black teachers get along	high - warm, open	-.08	.17	.12	.10	.02
298	.89	How do you and white teachers get along	high - warm, open	.00	.18	.17	.17	.09
306	.79	How do black & white teachers get along	high - warm, open	-.07	.16	.19	.06	-.07
C-9 Interpersonal Relations: Parents, Students				-.16	.08	-.01	.00	.01
GC299	.82	How do you and black parents get along	high - warm, open	-.09	.14	-.13	.00	-.01
300	.80	How do you and white parents get along	high - warm, open	-.14	.12	-.03	.01	.00
301	.70	How do you and black students get along	high - warm, open	-.06	.08	.14	-.01	.01
302	.67	How do you and white students get along	high - warm, open	-.08	.01	.13	.06	.02
307	.62	How do black and white students get along	high - warm, open	.04	.10	-.04	.12	-.02
C-10 Evaluation of Race-Relations Programs				-.19	-.27	-.07	-.25	-.05
GC253	.81	Minority culture courses	low - helpful	-.02	-.03	-.17	-.09	-.04
265	.81	Biracial advisory committee	low - helpful	.07	-.08	.05	-.06	-.12

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-7 Interpersonal Relations of Principal				-.14	-.19	-.06	-.02	-.22
GC296	.78	How do you and the principal get along	high = warm, open	-.19	-.22	-.10	-.01	-.24
303	.86	How do principal and teachers get along	high = warm, open	-.02	.09	.15	.07	-.18
304	.94	How do principal and B students get along	high = warm, open	-.14	-.18	-.11	-.04	-.21
305	.94	How do principal and W students get along	high = warm, open	-.09	-.14	-.09	.06	-.12
C-8 Interpersonal Relations with Teachers				.03	-.05	-.11	.18	-.18
GC297	.87	How do you and black teachers get along	high = warm, open	-.13	-.14	-.20	.17	-.14
298	.89	How do you and white teachers get along	high = warm, open	.03	.03	-.07	.17	-.13
306	.79	How do black & white teachers get along	high = warm, open	.15	.08	.07	.18	-.19
C-9 Interpersonal Relations: Parents, Students				.04	-.02	.02	.08	-.09
GC299	.82	How do you and black parents get along	high = warm, open	-.05	-.12	-.03	-.08	-.19
300	.80	How do you and white parents get along	high = warm, open	-.06	-.02	-.02	.05	-.07
301	.70	How do you and black students get along	high = warm, open	-.05	.01	.02	.07	.00
302	.67	How do you and white students get along	high = warm, open	.01	.05	.02	.14	-.03
307	.62	How do black and white students get along	high = warm, open	.37**	.28*	.24	.18	.01
C-10 Evaluation of Race-Relations Programs				-.24	-.31*	-.3[illegible]*	-.26	-.29*
GC253	.81	Minority culture courses	low = helpful	-.39**	-.30*	-.05	-.33*	-.27
265	.81	Biracial advisory committee	low = helpful	.09	-.17	-.33*	-.20	-.26

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	Black Student Outcomes				
				Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-11 Evaluation of Instructional Programs				-.17	.00	.07	-.22	.11
GC250	.32	Teacher workshops	low = helpful	-.28*	-.12	-.21	-.10	.00
251	.66	Remedial reading	low = helpful	-.14	.00	.05	-.13	.07
252	.74	Vocational training	low = helpful	-.13	-.01	.13	-.11	-.03
254	.76	Classrooms for underachievers	low = helpful	-.15	-.05	-.08	-.03	.08
255	.63	Classrooms for maladjusted	low = helpful	-.16	-.02	-.03	-.05	-.18
256	.45	Achievement grouping of classrooms	low = helpful	.02	-.25	-.13	-.32*	-.11
257	.51	Achievement grouping within classes	low = helpful	-.16	-.09	.25	-.27	.01
261	.66	Tutoring program	low = helpful	-.09	.40**	-.13	.01	.35*
C-12 Evaluation of Human Relations Programs				-.16	-.01	-.15	-.15	-.11
GC262	.84	Parent-contact program	low = helpful	.11	.23	-.06	.03	-.09
263	.85	Student intergroup relations	low = helpful	-.22	-.16	-.11	-.08	-.07
264	.67	Teacher intergroup relations	low = helpful	.09	-.04	-.31*	-.01	-.25
C-13 Evaluation of Services				-.01	.19	.18	.17	.23
GC247	.76	Guidance counselors	low = helpful	-.16	-.02	.02	.07	.13
248	.78	Social workers	low = helpful	-.15	.13	.44**	.12	.23
249	.25	Teacher aides	low = helpful	-.01	.20	.12	-.15	.09

Table B-2 (Continued)

Tenth Grade

I.D.	Loading	Description	Scale Direction	White Student Outcomes Perceived School Racial Attitude	Student Racial Attitude	Racial Contact	School Fairness	Achievement
C-11 Evaluation of Instructional Programs				-.05	.00	.01	-.04	.11
GC250	.32	Teacher workshops	low = helpful	-.18	-.22	-.27	-.03	-.13
251	.66	Remedial reading	low = helpful	-.13	-.10	-.11	-.16	-.17
252	.74	Vocational training	low = helpful	-.02	.02	.08	.07	.16
254	.76	Classrooms for underachievers	low = helpful	-.13	-.05	-.16	.15	.10
255	.63	Classrooms for maladjusted	low = helpful	-.34*	-.43**	-.48**	-.03	-.11
256	.45	Achievement grouping of classrooms	low = helpful	.17	.10	.06	.04	.39**
257	.51	Achievement grouping within classes	low = helpful	.00	.27	.21	.10	.25
261	.66	Tutoring program	low = helpful	-.36**	-.13	-.25	-.08	.10
C-12 Evaluation of Human Relations Programs				-.35*	-.39**	-.42**	-.24	-.13
GC262	.84	Parent-contact program	low = helpful	-.16	-.20	-.17	-.20	-.14
263	.85	Student intergroup relations	low = helpful	-.29*	-.54**	-.51**	-.22	-.27
264	.67	Teacher intergroup relations	low = helpful	-.18	-.17	-.72**	-.06	-.05
C-13 Evaluation of Services				.14	.18	.22	-.02	.14
GC247	.76	Guidance counselors	low = helpful	.00	.04	.07	-.05	.02
248	-.78	Social workers	low = helpful	.24	.22	.24	.16	.21
249	.25	Teacher aides	low = helpful	.04	.13	.03	-.06	-.08

APPENDIX C

PARTIAL CORRELATIONS BETWEEN PRESENCE OR ABSENCE OF SCHOOL PROGRAMS AS REPORTED BY THE PRINCIPAL OR TEACHERS AND THREE STUDENT OUTCOME MEASURES FOR BLACK AND WHITE STUDENTS

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Table C-1
Fifth Grade

Partial Correlations[1] between Presence (1) or Absence (2) of School Programs as Reported by the Principal (P) or Teachers (T) and Three Student Outcome Measures for Black and White Students.[2]

	Black Student Perceived School Racial Attitude		White Student Perceived School Racial Attitude	
	P	T	P	T
Guidance Counselors	-.04	.04	-.07	.06
Home Visitors	.22	.22	.01	-.03
Teacher Aides	.01	-.11	.08	-.02
Teacher Workshops	.17	-.03	.04	.01
Remedial Reading	.14	.12	.00	.23
Vocational Training	.09	.02	-.09	.10
Minority History	.21	.02	-.15	.01
Classes for Underachievers	-.08	-.09	-.10	.04
Classes for Maladjusted	.13	-.05	.02	.06
Achievement Grouping of Classrooms	-.09	-.14	-.01	-.15
Achievement Grouping within Class	-	.12	-	-.09
Curriculum Revisions	.11	.06	-.01	-.03
Extra Curricular Activities	-.04	.05	-.13	-.10
Late Bus	.04	-.12	-.05	.07
Tutoring Program	.03	.06	-.11	.13
Parent Teacher Contact	.14	.00	.13	.00
Group Relations:Students	.06	-.06	-.04	-.06
Group Relations:Teachers	-.10	-.09	-.04	.08
Biracial Advisory Committee	.16	.08	.09	.07
Equipment for Student Use	-.07	.18	-.05	-.05
Team Teaching	-	.16	-	.01
Ungraded Classes	-	.02	-	-.12
Experimental Classroom	-	.12	-	-.05

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[1] Effects of black and white student SES, percent black, percent urban and north/south have been removed.

[2] N = 76 schools; .22 = $p < .05$; .29 = $p < .01$

Table C-1 Continued
Fifth Grade

	Black Student Personal Racial Attitudes		White Student Personal Racial Attitudes	
	P	T	P	T
Guidance Counselors	-.01	.00	-.09	-.10
Home Visitors	.28	.12	.09	.01
Teacher Aides	.00	-.04	.08	-.05
Teacher Workshops	-.08	.00	.09	-.12
Remedial Reading	.00	.07	-.01	.07
Vocational Training	.14	.07	.11	.05
Minority History	.03	-.05	-.08	-.11
Classes for Underachievers	.08	-.23	-.12	-.11
Classes for Maladjusted	.12	-.24	.01	-.19
Achievement Grouping of Classrooms	.04	-.15	-.14	-.12
Achievement Grouping within Class	-	.00	-	-.16
Curriculum Revisions	.07	.18	.10	-.05
Extra Curricular Activities	.02	.07	-.08	-.17
Late Bus	-.04	-.20	.01	-.11
Tutoring Program	.04	-.02	-.10	-.29
Parent Teacher Contact	.20	-.04	-.04	-.16
Group Relations:Students	.07	-.17	-.12	-.12
Group Relations:Teachers	-.13	-.22	-.15	-.12
Biracial Advisory Committee	.17	.07	.10	-.06
Equipment for Student Use	-.07	-.02	-.16	.00
Team Teaching	-	.15	-	-.06
Ungraded Classes	-	.11	-	-.15
Experimental Classroom	-	.20	-	-.08

Table C-1 Continued
Fifth Grade

	Black Student Achievement		White Student Achievement	
	P	T	P	T
Guidance Counselors	-.13	-.04	-.31	-.10
Home Visitors	-.10	-.03	-.15	.05
Teacher Aides	-.03	.12	.08	.18
Teacher Workshops	-.11	-.14	-.18	.16
Remedial Reading	-.06	-.03	.02	.24
Vocational Training	.16	.13	.07	.17
Minority History	.05	-.08	-.04	.12
Classes for Underachievers	-.19	-.06	-.07	.08
Classes for Maladjusted	.07	-.13	-.05	.00
Achievement Grouping of Classrooms	-.16	.02	.03	-.07
Achievement Grouping within Class	-	.06	-	.05
Curriculum Revisions	.22	.18	-.10	.14
Extra Curricular Activities	.01	.07	-.18	.23
Late Bus	.17	-.04	.06	.21
Tutoring Program	.02	-.09	-.07	.00
Parent Teacher Contact	-.17	-.19	-.12	.21
Group Relations:Students	.09	.07	-.12	.19
Group Relations:Teachers	-.24	-.04	-.19	.23
Biracial Advisory Committee	.09	.16	-.03	.26
Equipment for Student Use	-.09	.06	-.03	.04
Team Teaching	-	.18	-	.20
Ungraded Classes	-	.06	-	.11
Experimental Classroom	-	-.11	-	-.02

Table C-2
Tenth Grade

Partial Correlation[1] between Presence(1) or Absence(2) of School Programs as Reported by the Principal(P), Teachers(T) or Guidance Counselors(C) and five Student Outcome Measures for Black and White Students.[2]

	Black Student Perceived School Racial Attitude			White Student Perceived School Racial Attitude		
	P	T	C	P	T	C
Guidance Counselors	-.05	.13	.34	.04	.03	.12
Home Visitors	.20	.00	.07	.27	.22	.22
Teacher Aides	-.06	.05	.11	-.14	.00	.06
Teacher Workshops	.10	.14	.05	.01	.13	.12
Remedial Reading	.04	-.01	.05	.06	-.03	-.06
Vocational Training	.00	.10	-.16	.00	.14	-.22
Minority History	.08	-.18	.06	.02	-.11	-.12
Classes for Underachievers	-.22	-.21	.15	-.37	-.13	.21
Classes for Maladjusted	.19	-.26	.06	-.10	-.09	-.01
Achievement Grouping of Classrooms	-.38	-.25	-.28	-.29	-.04	-.01
Achievement Grouping within class	-	-.24	-.18	-	-.05	.10
Curriculum Revisions	.07	-.20	-.13	.20	.05	-.13
Extra Curricula Activities	-.05	-.06	-.11	-.23	-.15	.14
Late Bus	.06	.06	-.10	-.02	-.05	-.09
Tutoring Program	.11	-.11	.07	.09	.05	.29
Parent Teacher Contact	.16	.18	.19	-.04	.13	.10
Group Relations: Students	-.12	.00	.15	-.10	.11	.01
Group Relations: Teacher	-.13	.00	.03	-.04	-.06	.09
Biracial Advisory Committee	.03	.01	-.03	.13	.32	.10
Equipment for Student Use	-.01	-.26	-.08	-.02	-.07	-.06
Team Teaching	-	-.23	-.04	-	-.26	-.09
Ungraded Classes	-	-.34	-.11	-	-.29	-.10
Experimental Classrooms	-	-.19	-.20	-	.15	.04

[1] Effects of black and white student SES, percent black, percent urban and north/south have been removed.

[2] N = 61 schools; .25 = p < .05; .32 = p < .01.

Table C-2 continued
Tenth Grade

	Black Students' Personal Racial Attitudes			White Students' Personal Racial Attitudes		
	P	T	C	P	T	C
Guidance Counselors	.02	.16	.16	.06	-.02	.03
Home Visitors	.15	.15	-.03	.28	.24	.22
Teacher Aides	.21	.11	.04	.09	.25	.17
Teacher Workshops	.19	.24	.28	.01	.13	.09
Remedial Reading	.23	.14	.15	.04	.17	.12
Vocational Training	.00	.02	-.07	.00	.13	-.03
Minority History	.17	-.06	-.06	-.28	-.14	-.26
Classes for Underachievers	.11	.21	.23	-.02	-.28	.11
Classes for Maladjusted	-.10	.03	.01	.03	-.10	.03
Achievement Grouping of Classrooms	-.12	.04	.00	-.07	-.11	-.09
Achievement Grouping within class	-	.01	-.15	-	-.03	.14
Curriculum Revisions	.24	.04	.01	-.07	-.09	-.13
Extra Curricula Activities	.22	.03	-.06	-.05	.32	.24
Late Bus	.18	.10	-.09	-.02	-.01	-.06
Tutoring Program	-.12	-.09	-.18	.00	.20	.30
Parent Teacher Contact	.25	.14	.25	-.07	.02	.11
Group Relations: Students	-.06	.20	.04	.02	-.01	-.12
Group Relations: Teacher	.10	.08	-.11	-.09	-.24	-.17
Biracial Advisory Committee	-.02	-.05	-.15	.19	.26	.26
Equipment for Student Use	.09	-.01	.12	.15	.07	-.02
Team Teaching	-	.10	.16	-	-.17	-.07
Ungraded Classes	-	-.01	-.01	-	-.11	-.11
Experimental Classrooms	-	-.03	-.03	-	.24	-.04

Table C-2 continued
Tenth Grade

	Black Student Racial Contact			White Student Racial Contact		
	P	T	C	P	T	C
Guidance Counselors	.00	.26	-.04	-.05	-.12	-.08
Home Visitors	-.08	-.13	-.13	.16	.08	.10
Teacher Aides	.16	.08	.01	.39	.46	.20
Teacher Workshops	.19	.00	.08	.12	.38	.17
Remedial Reading	.09	.12	.08	.23	.36	.27
Vocational Training	.00	.00	-.11	.00	.16	.05
Minority History	.03	-.10	-.44	-.15	-.08	-.25
Classes for Underachievers	.10	.04	.03	.10	-.14	.05
Classes for Maladjusted	-.03	-.27	-.08	.10	.00	-.03
Achievement Grouping of Classrooms	.10	.05	.02	.09	-.08	-.03
Achievement Grouping within class	-	-.10	-.02	-	.05	.07
Curriculum Revisions	.01	-.06	-.17	-.12	-.07	-.19
Extra Curricula Activities	.10	-.07	.06	-.14	-.21	.03
Late Bus	.13	.05	-.08	.02	.03	.03
Tutoring Program	-.03	-.08	.06	.09	.14	.05
Parent Teacher Contact	.06	.09	.09	-.03	.17	.06
Group Relations: Students	-.11	-.02	-.11	.02	.03	-.08
Group Relations: Teacher	-.26	-.02	-.16	-.04	-.15	-.13
Biracial Advisory Committee	.24	.04	.14	.07	.18	.15
Equipment for Student Use	-.11	-.01	-.07	-.05	.14	-.15
Team Teaching	-	.06	.01	-	-.01	.13
Ungraded Classes	-	.09	.11	-	.03	.00
Experimental Classrooms	-	.05	-.17	-	.16	-.15

Table C-2 continued
Tenth Grade

	Black	Students Efficacy	School	White	Students Efficacy	School
	P	T	C	P	T	C
Guidance Counselors	-.01	-.15	.21	-.19	-.10	.07
Home Visitors	.31	.12	.24	.13	.22	.12
Teacher Aides	.02	-.02	.07	.13	.03	.08
Teacher Workshops	.17	.00	.16	.00	-.02	.13
Remedial Reading	.12	.04	.20	.09	.18	.29
Vocational Training	.00	-.07	-.18	.00	-.11	.01
Minority History	-.22	-.27	.00	-.08	-.17	-.29
Classes for Underachievers	-.28	-.14	.19	.06	-.12	.00
Classes for Maladjusted	.04	-.02	.24	.17	.07	.25
Achievement Grouping of Classrooms	-.12	-.25	-.02	.09	.01	.25
Achievement Grouping within class	-	-.08	.08	-	.01	.01
Curriculum Revisions	.13	-.15	.05	.04	-.22	-.02
Extra Curricula Activities	-.28	-.38	-.02	.03	-.33	.24
Late Bus	.16	-.16	.00	.30	.03	.01
Tutoring Program	-.02	-.07	.02	.01	-.06	.01
Parent Teacher Contact	.01	.12	.22	.05	.12	.12
Group Relations: Students	-.25	-.04	.03	-.06	-.09	.05
Group Relations: Teacher	-.01	-.08	-.10	-.01	-.01	-.19
Biracial Advisory Committee	.18	.03	.06	.20	-.03	-.17
Equipment for Student Use	-.25	-.18	-.03	-.09	.15	.04
Team Teaching	-	-.11	-.04	-	-.08	-.11
Ungraded Classes	-	-.07	-.26	-	.17	-.09
Experimental Classrooms	-	-.04	-.24	-	.07	-.11

Table C-2 continued
Tenth Grade

	Black Student Achievement			White Student Achievement		
	P	T	C	P	T	C
Guidance Counselors	-.21	-.27	-.11	-.05	.02	-.03
Home Visitors	-.05	.04	-.10	.07	.21	.08
Teacher Aides	.23	.16	.10	.00	-.04	-.15
Teacher Workshops	.05	-.08	-.04	-.19	-.12	.04
Remedial Reading	.10	.18	.01	.11	.06	.09
Vocational Training	.00	-.03	-.10	.00	-.01	-.03
Minority History	-.18	-.14	.04	-.02	-.06	-.17
Classes for Underachievers	-.20	-.08	-.06	.32	.08	.00
Classes for Maladjusted	-.07	.01	-.04	.21	.12	.27
Achievement Grouping of Classrooms	.19	-.06	.10	.16	-.02	.05
Achievement Grouping within class	-	.13	.21	-	.00	-.25
Curriculum Revisions	.17	-.07	.06	.01	-.19	.17
Extra Curricula Activities	-.11	-.02	.12	.34	-.11	.10
Late Bus	.20	.02	.00	.22	.02	-.12
Tutoring Program	.01	-.08	-.17	-.08	-.13	-.15
Parent Teacher Contact	.01	-.15	-.26	.14	-.03	.15
Group Relations: Students	-.26	-.20	-.01	-.05	-.09	.07
Group Relations: Teacher	-.10	.15	-.19	.00	-.13	-.22
Biracial Advisory Committee	.21	-.15	.00	-.03	-.14	-.31
Equipment for Student Use	-.08	.06	-.10	.06	.11	.20
Team Teaching	-	.32	.28	-	.01	-.15
Ungraded Classes	-	.14	.08	-	.06	-.13
Experimental Classrooms	-	-.13	-.04	-	.05	-.16

APPENDIX D

1975 ZERO-ORDER CORRELATIONS BETWEEN AVAILABLE SCHOOL PROCESS VARIABLES AND STUDENT OUTCOMES

	Page
Fifth Grade	D-2

Table D-1

Fifth Grade

1975 Zero-Order Correlations between Available School Process Variables and Student Outcomes

	Teacher Variables	Perceived School Racial Attitude		Student's Personal Racial Attitude		Student Achievement	
		Black	White	Black	White	Black	White
1.	Teachers' racial attitude	-.07	.11	.33	.28	.37	-.27
2.	Support for integration	-.36	$-.47^{*}$	$-.49^{*}$	$-.43^{*}$	$-.49^{*}$	.23
3.	Absence of Tension	$.55^{*}$	$.61^{**}$	.24	$.46^{*}$	.27	-.19
4.	Teachers' job attitude	.24	.00	.00	.10	-.26	-.13
5.	Interpersonal relations with students	.26	$.44^{*}$	.27	$.45^{*}$	.26	-.21
6.	Interpersonal relations among teachers	.01	.36	.21	.22	.05	.20
7.	Interpersonal relations of principal	$.46^{*}$	.37	.01	.30	.04	-.19
8.	School autonomy	.11	.36	.30	$.56^{*}$	.32	.21
9.	Teacher autonomy	.11	$.53^{**}$	.27	.38	.16	.13
10.	Inequality	-.16	-.39	$-.44^{*}$	$-.40^{*}$	-.23	.10
11.	Perceived racial differences	Not Available					
12.	Desegregation process	$-.67^{**}$	$-.49^{*}$	-.18	$-.41^{*}$	-.12	.21
13.	Teaching style (1)	-.26	$-.56^{**}$	-.39	$-.55^{**}$	-.26	.03
14.	Teacher training	Not Available					
15.	Achievement evaluation	Not Available					
16.	Race relations practices	-.10	-.36	-.18	$-.43^{*}$	-.17	-.07
17.	Evaluation of services	Not Available					
18.	Evaluation of human relations programs	Not Available					
19.	Evaluation of instructional programs	Not Available					
20.	Extra time on task	-.02	-.13	-.06	-.05	-.15	.00
21.	Teacher vs. child-centered attitudes	-.25	-.26	-.10	-.10	.08	.04
22.	Structure	Not Available					
23.	Teaching style (2)	-.27	$-.41^{*}$	-.21	$-.47^{*}$	-.16	-.01
	Student Variables						
1.	Racial contact practices (Black)	-.08	-.05	.00	-.27	-.24	-.18
2.	Racial contact practices (White)	.21	.13	-.06	$-.41^{*}$	-.19	-.19

$^{*}p < .05$ $^{**}pp < .01$

N = 21 Schools

Table D-1 (cont.)

Fifth Grade

1975 Zero Order Correlations between Available School Process Variables and Student Outcomes

	Principal Variables	Perceived School Racial Attitude		Student's Personal Racial Attitude		Student Achievement	
		Black	White	Black	White	Black	White
1.	Principal's racial attitude	-.41*	-.16	.35	.41*	.58**	.02
2.	Support for integration	.25	-.22	-.49*	-.04	-.25	-.04
3.	Absence of conflict: discipline	Not Available					
4.	Absence of conflict: racial issues	Not Available					
5.	Absence of conflict: ability grouping	Not Available					
6.	Absence of conflict: instructional change	Not Available					
7.	Absence of principal's personal conflict	Not Available					
8.	School SES	.08	.01	-.50*	-.57**	-.54**	-.43*
9.	Violent behavior	-.58**	-.57**	-.02	-.28	-.08	.06
10.	Principal's interpersonal relations	-.16	-.10	-.35	-.08	.05	-.32
11.	Inequality (black and white parents)	Not Available					
12.	Principal's job attitude	-.27	-.07	.01	-.05	-.09	-.21
13.	Evaluation of race relations program	Not Available					
14.	Evaluation of instructional programs	Not Available					
15.	Evaluation of human relations programs	Not Available					
16.	Evaluation of services	Not Available					

* Significant at .05 level
** Significant at .01 level

N = 21 Schools

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